

Sinaran • MARCH 2008

MALAYSIAN SOCIETY OF RADIOGRAPHERS

Affiliated to The International Society of Radiographers and Radiological Technologists (I.S.R.R.T.)



CONTENTS

From The Secretary's Desk 2

Sinaran Editorial Board 2

How to Avoid "Death by PowerPoint" 3

Optimization of X-ray Practice in Plain-film Paediatric Radiography 4

Dealing With Negative Employees 6

A New Approach To An Appraisal At Work 7

New Radiation Technique Can Greatly Reduce Painful Skin Burns In Women With Breast Cancer 9

Advantages of Sonographic Imaging in Diagnosing Mucinous Cystadenocarcinoma 12

The 6th ABDA Teaching Course 16

Official Registration FORM 18

Tentative Programme 19

Abstract Submission Guidelines 20

Dear colleagues here are three lessons to make you think about the way we treat people. The Malaysian Society of Radiographers 38th Annual General Meeting carried the theme "Innovation is Care". It is without a doubt that technology is moving faster than we humans can adapt with the changes that confront us. Sometimes we forsake the needs of the people we meet in the name of visionary new practices. So it is timely that the MSR addresses this issue with our scientific meeting presentations and the MARCH 2007 Sinaran newsletter. Let us remember some of the "small" people we meet and how we can become their heroes by our simple but sincere gestures.

1. First Important Lesson –The Cleaning Lady

During my second month of college, our professor gave us a pop quiz. I was a conscientious student and had breezed through the questions until I read the last one: "What is the first name of the woman who cleans the school?" Surely this was some kind of joke. I had seen the cleaning woman several times. She was tall, dark-haired and in her 50s, but how would I know her name?

I handed in my paper, leaving the last question blank. Just before class ended, one student asked if the last question would count toward our quiz grade. "Absolutely," said the professor. "In your careers, you will meet many people. All are significant. They deserve your attention and care, even if all you do is smile and say "hello."

I've never forgotten that lesson. I also learned her name was Dorothy.

2. Second Important Lesson - Pickup in the rain

One night, at 11:30 p.m., an older African American woman was standing on the side of an Alabama highway trying to endure a lashing rainstorm. Her car had broken down and she desperately needed a ride. Soaking wet, she decided to flag down the next car. A young white man stopped to help her, generally unheard of in those conflict-filled 1960's. The man took her to safety, helped her get assistance and put her into a taxicab. She seemed to be in a big hurry, but wrote down his address and thanked him. Seven days went by and a knock came on the man's door. To his surprise, a giant console color TV was delivered to his home. A special note was attached..

"Thank you so much for assisting me on the highway the other night. The rain drenched not only my clothes, but also my spirits. Then you came along. Because of you, I was able to make it to my dying husband's bedside just before he passed away... Bless you for helping me and unselfishly serving others."

Sincerely,
Mrs. Nat King Cole
(wife to famous singer Nat King Cole)

3. Third Important Lesson – Always remember those who serve

In the days when an ice cream sundae cost much less, a 10-year-old boy entered a hotel coffee shop and sat at a table. A waitress put a glass of water in front of him. "How much is an ice cream sundae?" he asked. "Fifty cents," replied the waitress. The little boy pulled his hand out of his pocket and studied the coins in it. "Well, how much is a plain dish of ice cream?" he inquired. By now more people were waiting for a table and the waitress was growing impatient. "Thirty-five cents," she brusquely replied. The little boy again counted his coins.

"I'll have the plain ice cream," he said. The waitress brought the ice cream, put the bill on the table and walked away. The boy finished the ice cream, paid the cashier and left. When the waitress came back, she began to cry as she wiped down the table. There, placed neatly beside the empty dish, were two nickels and five pennies.

You see, he couldn't have the sundae, because he had to have enough left to leave her a tip.

Now you have 2 choices. Will you allow these 3 stories to inspire your journey down life's difficult times and overcome your obstacles heroically or will you just see them as 3 short little stories that were nice to read and leave it as that. It is your choice, which will determine your future. I choose to live with my heart on my sleeve because while **I can't choose my experiences in life but I can choose how to respond to them.**

Yours truly,
Gina Gallyot
Editorial Committee
Sinaran Newsletter, Malaysian Society of Radiographers

FROM THE SECRETARY'S DESK

Radiographers always seem to think along the same lines at the same time. As I received the Singapore Society of Radiographers first newsletter of 2008 I was pleasantly surprised that their Organising Committee has chosen the theme "OUR VISION TODAY, REALITY TOMORROW" as it ties in so closely with our theme for this year's MSR AGM and Scientific Meeting to be held in Melaka.

Our theme is titled "INNOVATION IS CARE" which affects every member of the Medical Imaging team as every discipline strives to perfect the quality of their work mainly through the patient's assessment of the radiographers care. Years ago we concentrated on achieving competency but now we have to focus on accountability as the patients become more educated and knowledgeable. We can no longer afford to be dormant when it comes to delivering care to patients, we need to envision the patients' needs first and then commit to developing new standards of care that will become tomorrow's reality. A vision that undoubtedly includes improved patient care and zero tolerance of errors.

Innovation is Care! - While there are many classic definitions of the word *innovation* for medical personnel the most accurate would be to consider innovation as the *change that creates a new dimension of performance* as it will correlate with the care we give to our patients.

In economics, business and government policy, - something new - must be substantially different, not an insignificant change. In economics the change must increase value, customer value, or producer value. Innovations are intended to make someone better off, and the succession of many innovations grows the whole economy.

The term innovation may refer to both radical and incremental changes to products, processes or services. The often unspoken goal of innovation is to solve a problem. Since innovation is also considered a major driver of the economy, the factors that lead to innovation are also considered to be critical to policy makers.

However as medical professionals we have to be careful in designing and creating new methods or procedures as we always have to have as top priority the patients we handle. We are bound by ethics of care which emphasises the importance of relationships.

It's well and good to feel as though you have changed the attitude with which you render extra service, but if that service is in truth no more than anyone else's, then you aren't doing yourself much good.

You need to examine your co-workers and competitors to understand just what it is that will make you stand out. If there are job performance standards, exceed them. If you're fulfilling a contract, make sure you offer more than you promised. You cannot confine extra-mile service to your work alone. You must make it part of your philosophy for dealing with every person you encounter. Imagine how others will be delighted to find that you are the type of person who not only does what is promised but even delivers more. The true benefit of going the extra mile is in teaching yourself to strive always for better and greater achievement in all that you do.

Yours truly,
Packya Narayanan Dassan
MSR Secretary

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ANNOUNCEMENTS

The Education Chairman, En. Sawal Marsait has resigned from his post effective 17th January 2008.

The Assistant Secretary, En. Mohammad Mazli Zin will take over his current duties till further notice. Elections for the vacated post will take place at the 38th AGM in 2008.

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How to Avoid “Death by PowerPoint” Solving the Five Most Common Problems With PowerPoint Presentations

by Dave Paradi, MBA, co-author of “Guide to PowerPoint”

With more and more people using PowerPoint to deliver presentations, we are seeing it used poorly so many times that a new phrase has been coined to describe the poor use of visuals during a presentation – “Death by PowerPoint”. Here are the five most common problems with PowerPoint presentations and how you can solve them so that you avoid “Death by PowerPoint”.

Problem #1: The presenter focused more on the visuals than the content

This problem is usually identified when the audience leaves the presentation and says that the slides were nice, but they can’t remember what the speaker said. Preparing your presentation using a proper approach can solve this.

First focus on the desired outcome of the presentation and the background and composition of the audience to determine the key points that will move the audience from where they are to your desired end point.

Then do additional research to provide backup for each key point.

Next, focus on the content only by using the Outline View in PowerPoint to outline the key points and supporting material.

Once the outline is tested for fit with the purpose of the presentation and the time allotted, then proceed to the visual part of the presentation slides.

One should never be concerned about how the slide looks until one is clear that the slide has meaning.

Problem #2: The audience can’t clearly see the slides

There are two common causes of this problem.

The first is that there is not enough contrast between the text colour and the background colour on the slide. Many times the colours look fine on our computer monitor, but when projected, they change. No projector, however expensive, will truly show the colours the same way. The best contrast combination that I have found is to use a medium to dark blue background with yellow or white text. Make sure that you check the colours on a projector before you present to be sure what they will look like.

The other common cause of this problem is that the font size chosen for the text is too small. When deciding what font size to use in your presentation, make sure it is big enough so that the audience can read it. I usually find that any font size less than 24 point is too small to be reasonably read in most presentation situations. I would prefer to see most text at a 28 or 32 point size, with titles being 36 to 44 point sizes. The only reason I would use a font less than 24 point is when adding explanatory text to a graph or diagram, where you could use a 20-point font size.

Problem #3: The audience is distracted by the visuals

The most common cause of this problem is having

objects or text move on the screen while the presentation is going on. The basic premise when designing visuals is that they add to the message and they do not make the audience work. If the audience is spending time and energy watching the visuals, they have less energy to devote to the message, which is the most important part of the presentation.

There are a lot of features in PowerPoint that allow slide designers to introduce movement and sounds on slides and unfortunately these features tend to be overused.

Any graphic, sound or video should add value to the point being made, not be there because it could be done.

Text movement is also problematic because it is virtually impossible for someone to read text while it is moving. This causes audience members to wait until the text stops before they can read it, and increases the time they spend looking at the screen and decreases the time and attention they focus on the presenter and the message.

Use text movement with caution.

Problem #4: Pointer movement on the screen

It is very distracting for the audience when the pointer (the arrow) moves across the screen during the presentation. This happens when you move the mouse in the Slide Show View. If you use a mouse (remote or attached) to advance slides, movement of the mouse directional control (ball or pad) will cause the pointer to appear and move on the screen.

This is a very easy problem to solve. After the Slide Show View is started, press the Ctrl-L key combination. This hides the pointer even if the mouse moves. If you need to display the pointer during the presentation, press the Ctrl-A key combination.

Problem #5: Dropping into the program

It reduces your effectiveness as a presenter if during or after the presentation the audience sees the PowerPoint program displayed on the screen. This usually happens in one of two ways.

First, at the end of the presentation, if you advance past the last slide, it will drop you into the program. The simple way to solve this is to duplicate your last slide three times at the end of your presentation. This way, if you advance one too many times, it won’t matter because the image is the same.

The other way this happens is if the pointer appears on screen during the presentation, our natural tendency is to press the Escape key. This will not clear the pointer, but it will drop us into the program. If the pointer does appear on the screen during the presentation, resist the temptation to press the Escape key, press the “A” key instead. This will hide the pointer. You can also hide the pointer using the Ctrl-L key combination as referred to above.

OPTIMIZATION OF X-RAY PRACTICE IN PLAIN-FILM PAEDIATRIC RADIOGRAPHY

R. Subramaniam, MSc, BSc(Hons), TDCR

College of Radiography, University of Malaya Medical Centre, Kuala Lumpur

Email: SUBRAM@ummc.edu.my

Introduction

Children undergoing radiography pose a challenge to the radiographic technique and ability of the imaging staff. Children can be uncooperative or obstructive during radiographic procedures. They also come in different age groups and sizes. Children are more susceptible to the effects of ionizing radiation than adults which places added burden on radiographers and radiologists to attain the best possible results every time.

The United Nations Scientific Committee on the effects of Atomic Radiation (UNSCEAR) have emphasised that radiation risk is strongly dependent on the age at which exposure occurs. Irradiation of radiosensitive bone marrow in children increases the risks of induced leukaemia and genetic effects. 'Radiation exposure in the first ten years of life is estimated to produce a risk of total aggregated detriment 2-3 times greater than exposure between the ages of 30-40 and 5-7 times greater than exposure after the age of 50'. Techniques aimed at reducing radiation dose in paediatric radiology are therefore of paramount importance.

Children need more careful evaluation with regards to the necessity of examination and radiographic technique needs to be even more exacting. It is important that the radiation dose to children arising from diagnostic medical exposure is minimized.

Review of diagnostic radiology found that there was a high potential for patient dose reduction through optimization of radiological technique and X-ray equipment. In the UK and Europe there have been various initiatives aimed at reducing patient dose and improve the radiographic practices involving children. The European Commission has recognized the need for the special treatment of children in the X-ray department, in both the "European guidelines on quality criteria for the diagnostic radiographic images in paediatrics, EUR 16261EN, 1996", and the "Council Directive 97/43/Euratom, 1997". In the UK, a major specialist paediatric hospital has published the "Guidelines on best practice in the X-ray imaging of children, 1998". These guidelines suggest examples of good radiographic technique, present useful image quality criteria for a number of common paediatric projections and reference dose levels with the aim of producing high quality images at the lowest possible dose to the patient.

In Malaysia, there is a lack of specialist children hospitals. Paediatric patients are commonly examined in general hospitals where education, training and expertise in paediatric radiology are usually limited. Therefore, there is a greater onus on staff in general hospitals, working with children who have a normal life expectancy, to keep doses to a minimum.

The basic principles of radiation protection of the patient as recommended by ICRP are justification of practice and optimization of protection, including the consideration of dose reference levels. These principles are translated into x-ray practices and performance by the imaging staff aimed at producing high quality images and reduced dose to paediatric patients.

General Principles Associated With Good Imaging Performance In Paediatric X-Ray Practice.

Necessity of Examinations

There is considerable evidence that many radiological examinations are unnecessary. Ensuring that only those examinations which have a direct effect on patient management are performed is an extremely important first-step in reducing overall exposure to medical radiation.

It is essential that each request form received is signed and has adequate clinical information meeting established criteria agreed by clinicians and radiologists. Each examination must be justified and be the correct and most appropriate investigation for each patient.

Referral criteria have been included in these guidelines to act as a baseline but the most effective way of ensuring that only necessary examinations are performed is to have close cooperation from clinical colleagues, with regular educational meetings addressing the requirements for successful radiation protection. These are particularly important and have to be regularly repeated for junior clinical colleagues, who are more likely to succumb to radiological requests to cover any clinical uncertainty or lack of experience.

Radiographers are usually first in line in the receipt of a radiological request and must be able to rely on strong, radiological support in ensuring the validity of requests.

Image Quality

It is recognised that diagnostic image quality is more difficult to achieve in children. They can be uncooperative and their faster heart and respiratory rates mean that movement blurring is more common than in adult patients. It is recommended that in a general department a specific X-ray room should be dedicated for paediatric work and be child friendly. There should be a core group of staff with direct responsibility for vetting paediatric requests, managing paediatric patients and ensuring that acceptable levels of image quality in paediatrics are maintained. These staff should develop their paediatric skills in addition to being given adequate time to explain procedures to the child and his/her parents to gain the child's confidence.

Established guidelines on paediatric imaging include specific advice regarding holding techniques. Incorrect positioning or immobilisation of paediatric patients is often the cause of inadequate imaging. Immobilisation equipment does not need to be complex or expensive and a range of simple home made devices such as Velcro strapping, buckybands, sand bags, sponge wedges, foam pads and seating of varying sizes should be to hand.

These should always be used in preference to physical restraint but when this is unavoidable, a careful explanation must be given to the holding person so that they are adequately prepared. It is also the responsibility of the radiographer and radiologist to ensure that the holder is completely outside the primary beam and is protected from scattered radiation. This is particularly important for clinical and nursing staff who may be frequently asked to assist in this way e.g. SCBU/casualty nurses. A holder's record should be kept.

Image quality forms should be produced for each examination so that evaluation can be as objective as possible and specific areas of failure can be easily identified and rectified. Regular assessment of image quality is invaluable for constructive feedback and self education but one must not lose sight of the fact that if an examination is suboptimal but fulfils diagnostic requirements it should not be repeated to comply with aesthetic criteria alone. To some extent the requirements for image quality are dependent on the suspected pathology e.g. for post-operative position of hips, a lower standard of image quality may be accepted.

Radiation Dose

The selection of high speed screen/film systems, avoidance of anti scatter grids if not necessary, use of additional filtration and choice of high kV, short exposure techniques are the most important factors in minimising radiation dose in paediatric radiology.

For each examination, the requirement for high resolution should always be weighted against the necessity to limit dose. In most cases, reduced resolution of fast screen/film systems with a minimum speed class of 400 is acceptable for diagnostic purposes. Furthermore, it was found that the dose saving from the use of fast 700 speed class screen/film systems justified the loss of resolution in those examinations where only positional information was required, such as follow-up of spinal curvature and position of the femoral head in Dynamic Dysplasia of the Hip.

It is strongly advised that use of an antiscatter grid is often unnecessary in infants. It must always be remembered that use of a Bucky beneath the table usually entails the use of a grid. The same may be true for skull tables and vertical chest stands. Simple equipment alterations may be required so that a patient can be easily and comfortably immobilised and positioned directly onto the cassette without the use of a grid unless specifically recommended. All fluoroscopy units should have easily removable grids.

High kV techniques, which allow a reduction in mAs and exposure time, produce significant reductions in dose as well as movement blurring. However, they require high frequency or constant potential generators to provide accurately reproducible short exposure times.

Adequate additional filtration is recommended not only to enhance the capability of more limited equipment but to further absorb the soft part of the radiation spectrum which unnecessarily contributes to patient dose without significantly effecting the quality.

Expensive rare earth filters were not found to convey any significant dose or image quality benefit over copper. Additional tube filtration of 0.1mm Cu or equivalent is advised (except in SCBU and in low kV techniques) with equipment having existing total filtration of about 2.5 mm Al for most examinations.

A radiological preference for films produced at high kV, with reduced density and less contrast should be developed to enable a reduction in mAs and therefore in the dose to the patient.

The use of dose-area product (DAP) meters should be routine. They give important feed-back and encourage low dose techniques in staff employing them. Doses presented in paediatric x-ray guidelines represent achievable doses using the described technique, whilst maintaining adequate image quality.

Radiation Protection

Lead protection is too often absent, misshapen, incorrectly positioned or inadequate. It should be remembered that not only is gonad protection vitally important for children, but that radiosensitive cell-forming bone marrow is present in most bones at birth. The developing breast and thyroid are also more radiosensitive.

Lead rubber shielding of the parts of the body next to the primary beam should always be performed to protect against primary and scattered radiation. In neonatal radiography, lead masking techniques on top of incubators should always be used. The ribs, breast and sternum should be protected when performing abdominal radiographs.

PA projections are always advocated as soon as age allows, to reduce eye and breast dose in skull, chest and spinal radiography respectively.

Specifically shaped lead gonad shields of various sizes are recommended as they are less likely to obscure vital information than the use of arbitrary pieces of lead rubber.

Radiographs of the male abdomen must have gonad protection. Guidelines regarding use of gonad protection should be strictly adhered to. Additional specially-shaped lead coning devices (e.g. for whole spine in scoliosis and for lateral cephalograph examinations) are recommended.

Recommendations for Good X-ray Practice

Paediatric Practice

The validity of each request form should be carefully considered with regard to necessity of examination, appropriateness of examination and timing of examination.

There should be a selected core of staff primarily responsible for the management of paediatric patients.

Close clinical/radiological cooperation with regular educational meetings, stressing the need for radiation protection should occur.

Radiographers/Radiologists undertaking paediatric imaging should be given adequate time to provide explanations to parents and children in order to gain their confidence and cooperation.

Equipment & Accessories

A child friendly environment with equipment dedicated to paediatric imaging is advisable.

There should be a variety of simple restraining devices readily available.

Powerful high frequency or constant potential generators are required. Short exposure time, high kV -low mAs techniques should be employed and all exposure factors should be recorded on the films or request forms.

Total tube filtration of about 2.5mm Al + 0.1 mm Cu or equivalent should be used, except in SCBU and for NAI skeletal survey.

Tight collimation is essential. Devices which cone to the cassette should not be used and the position of all 4 cone marks should be clearly visible on the film.

When using additional beam shaping devices (e.g. for scoliosis imaging) collimation with the LBD is still essential.

Stationary/moving grids should only be used where necessary and according to strict guidelines.

Routine use of Automatic Exposure Controls (AEC) should be avoided as they usually incorporate a grid and lengthen the minimum exposure time.

The fastest screen/film system allowing films of diagnostic quality should be selected.

Films should be processed at the optimum temperature for the equipment available. Temperature of 32-33°C is recommended.

A wide range of specifically shaped gonad/organ protection devices should be used and carefully positioned.

Over-penetrated films should be copied lighter to reduce the possibility of repeat exposures.

With the advent of CR and DR imaging technology, it is necessary to monitor the exposures given in view of the potential for "exposure creep", where higher exposures are given but acceptable images are obtained following post-processing.

References

- Commission of European Communities, (1996). *European guidelines on quality criteria for the diagnostic radiographic images in paediatrics*, EUR 16261 EN, Luxembourg.
- Cook J V et al., (1998). *Guidelines on best practice in the X-ray imaging of children*, London: St George's Hospital & St Helier Hospital.
- Cook J V et al., (2001). *Key factors in the optimization of paediatric X-ray practice*, Br. J. Radiol., 74, 1032-1040.
- Kyriou J C et al., (1996). *A Comparison of Dose and Techniques Between Specialist and Non-Specialist Centres in the Diagnostic Imaging of Children*, Br. J. Radiol., 69, 437-450.
- Mooney R, Thomas P S, (1998). *Dose reduction in a paediatric X-ray department following optimization of radiographic technique*, Br. J. Radiol., 71, 852-860.
- National Radiological Protection Board (NRPB), (1993). *Occupational, Public and Medical Exposure, Documents of the NRPB 4(2)*, HMSO.

DEALING WITH NEGATIVE EMPLOYEES

Do you have an employee who is frequently disgruntled with their job duties, with the organization, or with management? For example, does the employee go out of his or her way looking for something to complain about? Does the employee attempt to stir up discontent in his or her coworkers just for their own enjoyment? Does the employee take pleasure in being able to spot all the flaws in any new initiative the organization undertakes? Is the employee resistant to any proposed organizational change? Is the employee making you angry, frustrated, and helpless?

Let's face it! The negative employee is the type of employee that most managers would love to have call in sick, take an extended vacation, and then utilize all their vacation time. Unfortunately, for you as the manager, the negative employee comes to work everyday. Not only does the negative employee come to work everyday, he or she is usually never late to work, completes his or her job duties, and does not break any company policies. The negative employee does not provide you, the manager, with any easy to evaluate objective work performance deficits. Thus, you must deal with his or her negative behavior versus any easier to measure work performance deficits.

Have you ever wondered why the negative employee comes to work everyday if he or she is so unhappy with their job duties, the organization, or with management? Why doesn't the negative employee simply find another job where he or she will be happier?

There are two simple answers to these questions:

One, the main goal of a negative employee is to undermine and contaminate the workplace environment; thus, becoming toxic to the organization's ability to effectively function. In other words, why miss work when there is so much toxic work to do. In plain English, the negative employee's goal is to undermine either the organization or people within the organization for any number of reasons. (Note: It is more important to identify patterns versus causes of negative behaviors in the early stages of dealing with a negative employee.)

Two, the negatively employee is rewarded for their negativity inadvertently by their organization, e.g., pay increases, seniority, and good benefits. So, why not come to work if you get paid to complete your goal of undermining others!

Note: If the negative employee's behavior has not been addressed in the past, it is quite possible that the negative employee has, for many years, received positive work performance evaluations with pay increases. After all, in terms of objective work performance measures, the negative employee has good attendance, is on time to work, does his or her job duties, and follows all company policies.

If you believe that you are a manager of a negative employee, the following steps will help you to successfully deal with his or her negativity.

- Observe and quantify the negative employee's behavior: Before you approach the negative employee, you need both observational data, i.e., examples of negative behavior, and an accurate quantifiable account of the number of negative behaviors observed. For example, "I have observed you telling four employees last week that they should resist using the new accounting methods."

This first step does require a degree of preparation because without observing and quantifying instances of negative behaviors, the negative employee will simply discount your observations. For example, the negative employee might tell you he or she was simply joking, or that you misunderstood their true intentions.

Note: One instance of negative behavior is not enough evidence to label an employee as negative. Secondly, do not tell the employee he or she

has a bad or negative attitude. Instead, describe the negative behavior and its negative impact on the organization and coworkers.

- Get organizational support: It is a good idea to run your data of negative behavior observations past another manager or your Human Resource department, in order to get validation that the behaviors you have observed do indeed undermine the organization's goals or creates a toxic environment for other employees. It is also a good idea to work with another manager, who can act as a witness to your behavior, during any closed-door meeting you have with the negative employee. Remember, you are dealing with an employee who is already acting out their discontent; therefore, you need to have organizational support and a witness, to your interactions, when dealing with the negative employee.
- Forget the confession of wrongdoing: It is not necessary for the negative employee to admit to or apologize for his or her negative behavior. It is only your aim to bring to the negative employee's attention that you are aware of their toxic behavior.
- Affirm the organization's core beliefs: Inform the negative employee of the organization's mission, values, and goals. Succinctly tell the negative employee the mission of the organization, the values the organization espouses, and the goals the organization is attempting to achieve. Next, clearly articulate to the negative employee how his or her behavior undermines the organization's core beliefs, and how a change is necessary for both their individual success and the organization's success.
- Offer to help the negative employee: Ask the negative employee what would help him or her turn their negative behavior into positive behavior. In this step, you may get an explanation of what is motivating his or her negative behavior. The explanation may assist you in understanding what type of help to offer the negative employee to become more positive.
- Consider a referral to an employee assistance counselor if the negative employee brings up personal, family, or mental health problems. If the employee is stubborn and refuses assistance, do not force professional assistance upon the negative employee. If the employee brings up work related issues, e.g., lack of advancement, stress, or job insecurity; consider providing the negative employee with supportive listening, coaching, and mentoring.
- Inform the negative employee that future work performance reviews will include both objective and subjective measures: One subjective measure may include an assessment of how the employee is either increasing or decreasing his or her negative behaviors, by asking colleagues and other managers for feedback. Don't forget to utilize a positive tone when discussing future work performance reviews; for instance, predict what a future passing work performance review will look like for the employee.
- Do not make the negative employee more negative: The goal is not to make a negative employee more negative, which is easy to do since the employee is already negative. Thus, you need to be very careful not to throw gas on a fire!

Remember these three rules:

Rule 1: You cannot change a negative employee with negativity. Hence, you must reframe from acting negative yourself. Keep your cool and be positive when talking with the negative employee.

Rule 2: Keep your overall expectations low. Do not expect an apology and do not expect the negative employee to admit to their negative behavior.

Rule 3: Employees want to be believed-in by their manager, even when they are being disciplined. Therefore, end your talk with a positive "you can do it" statement.

A NEW APPROACH TO AN APPRAISAL AT WORK

The classification of the term appraisal is evaluating someone or something with respect to its worth. In other words it is the systematic evaluation of the individual with respect to his or her performance on the job and his or her potential for development. At one time appraisal was called a merit rating and was tied fairly close to salary increases. More recently it was termed staff evaluation, but because the term evaluation implies that personal values are being placed on the performance review that term is used infrequently. Most health care organizations use the term performance appraisal because it implies an appraisal of "how well employees perform the duties of their job as delineated by the job description."

It consists of:

- setting standards and objectives
- reviewing progress
- having ongoing feedback between appraiser and the employee
- planning for reinforcement, deletion or correction of identified behaviors as necessary.

Do personality types play a role?

Understanding personality types is helpful for appreciating that while people are different, everyone has a value, and special strengths and qualities, and that everyone should be treated with care and respect. People very rarely set out to cause upset - they just behave differently because they are different.

Personal development is necessary

Personal development and support must be offered to all employees, irrespective of age, gender, race, disability, etc., and not just to those seeking promotion. Development is not restricted to job skills - it includes 'whole person'.

Job skills training aren't just restricted to courses.

Think about:

- coaching
- mentoring (by and of the appraisee)
- secondment to another role,
- holiday job cover
- shadowing
- distance-learning or e-learning
- books and videos
- attending meetings and workshops
- workbooks, manuals and guides
- researching
- giving presentations

or anything relevant and helpful to help the person develop.

However avoid committing to training expenditure before suitable approval or availability has been confirmed. Understand development options and procedures before conducting the appraisal. Strive to develop the whole person.

Jack Welch, respected business leader and writer is quoted as proposing these fundamental leadership principles (*notably these principles are expanded in his 2001 book 'Jack: Straight From The Gut'*):

1. There is only one way - the straight way. It sets the tone of the organisation.
2. Be open to the best of what everyone, everywhere, has to offer; transfer learning across your organisation.
3. Get the right people in the right jobs - it is more important than developing a strategy.
4. An informal atmosphere is a competitive advantage.
5. Make sure everybody counts and everybody knows they count.
6. Legitimate self-confidence is a winner - the true test of self-confidence is the courage to be open.
7. Business has to be fun - celebrations energise and organisation.
8. Never underestimate the other guy.
9. Understand where real value is added and put your best people there.
10. Know when to meddle and when to let go - this is pure instinct.

Remember....."... Praise loudly, blame softly." (Catherine the Great).

As a leader, your main priority is to get the job done, whatever the job is. Leaders make things happen by:

- knowing your objectives and having a plan how to achieve them
- building a team committed to achieving the objectives
- helping each team member to give their best efforts

As a leader you must know yourself. Know your own strengths and weaknesses, so that you can build the best team around you.

Tips on preparing for your appraisal

1. Be as truthful as you can without exposing yourself unnecessarily. Obviously if your company and/or boss do not have a positive and fair approach be careful not to create vulnerabilities for yourself.
2. Always be positive, never negative - don't complain, don't point out problems, avoid making personal attacks on anyone or their abilities. If there are problems express them as opportunities to develop or improve, and if possible suggest or recommend how these improvements can be made.
3. Ask for help and training and coaching and development in areas that you believe will improve your productivity and value to the organization.
4. Look for ways to relate personal growth and development of your own passions and interests outside of work, to your work, and the benefits this sort of development will bring to your employer. Think about your hobbies and your natural strengths - they will almost certainly entail using many attributes that will be helpful for your employer - perhaps beyond the role that you find yourself in currently. If your employer is unaware of your talents and potential make sure you tell your manager, and if your employer fails to understand the benefits of helping you to follow your unique personal potential (which each of us has) then maybe think about finding an employer who places a higher value on their people.
5. Use the list or skill categories on the appraisal form to assess your capabilities and behaviors one by one - be specific, objective and be able to reference examples and evidence. This is an important area for the appraisal meeting itself so think about it and if necessary ask others for feedback to help you gather examples and form a reliable view of your competence in each category listed. If the appraisal form does not have a list of skills and behaviors create your own (use your job description for a basis).
6. Assess your performance for the appraisal period (normally the past year) in each of your areas of responsibility; if there are no specific responsibilities or objectives brought forward from your previous appraisal or on-going meetings with your manager again use your job description as a basis for assessing your performance, competence and achievements.
7. Identify objectives for yourself for the next year. These should be related to your current job responsibilities and your intended personal development, and be a mixture of short, medium and long-term aims (ie, days or weeks, months, and a year or more). Attach actions and measurable outputs to these aims and objectives -this is a commitment to change and improve which demonstrates a very responsible and mature attitude. If your aims and actions require training or coaching or other support then state this, but do not assume you have a right to receive it - these things cost money and your manager may not be able to commit to them without seeking higher approval.
8. Think about and state your longer-term aspirations - qualifications and learning, career development, and your personal life fulfillment issues too - they are increasingly relevant to your work, and also to your value as an employee.
9. Seek responsibility, work, and tasks within and beyond your normal role. Extra work and responsibility, and achieving higher things develop people and increase productivity for and contribution to the organization. Always seek opportunities to help and support others, including your boss.
10. Always look upon reward as an economic result of your productivity. You have no 'right' to reward or increase in reward, and reward is not driven by comparisons with what others receive. Reward, and particularly increase in reward, results from effort and contribution to organizational performance. As such, if you want higher reward, seek first the opportunity to contribute more.
11. Assessment is not confined to past performance alone but employee's potential for future performance must also be assessed.

Remember..... "... Praise loudly, blame softly." (Catherine the Great).

New Radiation Technique Can Greatly Reduce Painful Skin Burns In Women With Breast Cancer

– Article adapted by Medical News Today from original press release –

Breast cancer patients who undergo a new radiation technique called intensity modulated radiation therapy (IMRT) after surgery are three times less likely to have severe skin reactions from the treatment compared to standard radiation therapy, according to a study presented at the plenary session November 6, 2006, at the American Society for Therapeutic Radiology and Oncology's 48th Annual Meeting in Philadelphia. The study is the first of its kind to show how recent dramatic improvements in radiation treatments directly benefit patients.

"Using IMRT, we are able to dramatically reduce the painful side effects of radiation, thereby improving the patient's quality of life," said Jean-Philippe Pignol, M.D., Ph.D., lead author of the study and a radiation oncologist at Sunnybrook Health Sciences Centre in Toronto, Canada. "Patients should be aware that breast IMRT has fewer side effects than standard radiation therapy and is now widely available."

The current standard of care for breast cancer is surgical removal of the cancer, followed by radiation to the breast to kill any remaining cells. The standard radiation technique uses two opposite radiation beams on the whole breast to target the cancer and can cause excess amounts of radiation to certain areas of the breast, increasing the risk of the patient developing sensitive, red, weepy skin that may blister and peel. The majority (80 percent) of severe skin burns occur on the breast crease, located between the bottom of the breast and the chest wall.

Using IMRT, however, radiation oncologists are able to control the intensity of each beam to better spare nearby healthy tissue, thereby minimizing the risk of too much radiation on a part of the breast and severe skin reactions. The treatment was able to significantly reduce this occurrence in women with large breasts, who are more likely to have severe skin reactions.

In this study, 358 patients were randomly assigned to receive either the standard breast radiation treatment or breast IMRT and were observed during and for six weeks after treatment.

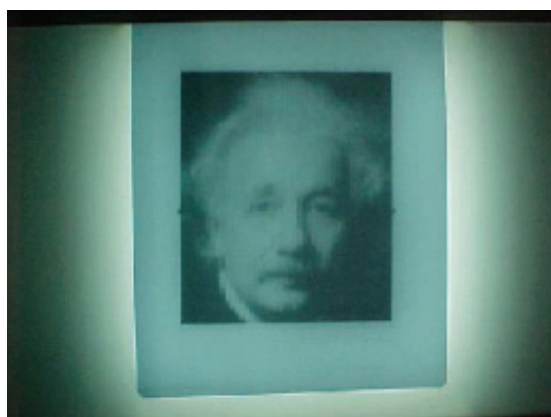


Diagram 1

IMRT (Intensity Modulated Radiation Therapy) is like painting with radiation. You can see this effect in the picture of Einstein, (**Diagram 1**) which was made by a linear accelerator, using IMRT. It allows the physician and dosimetrist to create a plan that allows us to deliver a high amount of radiation to the areas that are very important to get a radiation dose to, such as the lumpectomy cavity, and then to decrease and limit the amount of radiation exposure to normal and critical organs, such as the lung or the heart on a left sided breast cancer. In the example above, the darker areas would be those exposed to more radiation, and the lighter areas received less amounts of radiation. You can see how precise this can be when done correctly.

The traditional or standard or care for breast radiation is a 3D plan typically consisting of two tangential fields. It may look something like this (**Diagram 2**). As you can see in the picture on the right, there would be a field that comes from the upper left hand side, and entering the patient, and another field that would be coming from the bottom right hand side and then entering the patient as well. Since this is a left sided breast cancer, you can also see that there is a small portion of lung (orange color) and heart (pink/magenta color) that is included in the treatment fields.

Since the breast tissue goes all the way down to a patients chest wall, or rib cage, there has traditionally been about 1.5 to 2.0cm of lung included in most physicians breast plans. This is to ensure that all of the breast tissue is being included in the radiation field, and that even with the motion of patient breathing, that the breast is always targeted with the radiation that is being administered to the patient.

The one down fall with conventional, or tradition breast radiation is that radiation is trying to be delivered to a large area of tissue, and trying to deliver a dose that is the same through out. Unfortunately, we all know that breast tissue is not a nice little box that is the same size in all directions.

Due to this factor alone, there tends to be these hot spots in the areas of breast tissue that happen to be thicker, have more tissue overlapping itself, such as underneath the breast tissue and next to the rib cage of a woman, or perhaps where there is not enough breast tissue. We then try to “compensate” for this difference in breast tissue with the use of a device that we call a “wedge”. (*Diagram3*)

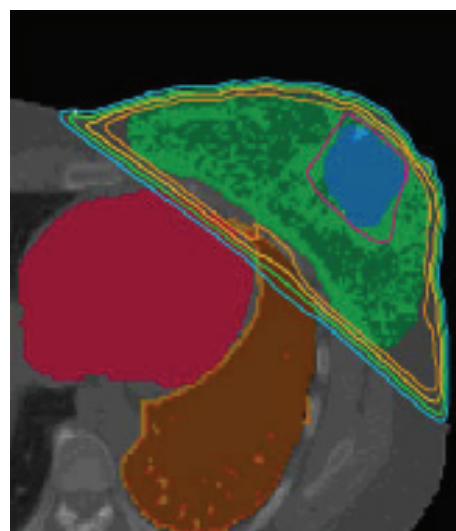


Diagram 2

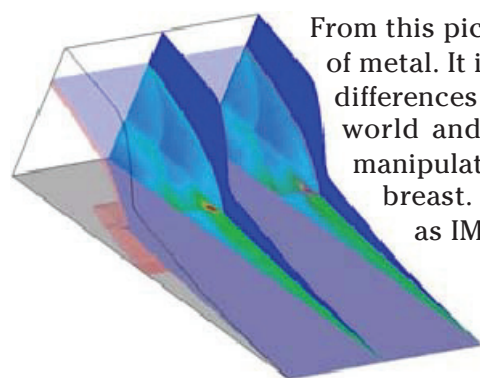


Diagram 3

From this picture you can see that it does look like one would think, like a wedge of metal. It is placed in the machine and will try to help and compensate for the differences in breast tissue for a specific patient. Unfortunately, it isn't a perfect world and there are only so many things that wedges allow physicians to manipulate the radiation beam in order to make it more precise in treating the breast. It does not allow us to eliminate or diminish hot spots as drastically as IMRT.

In these instances, patients may end up having some skin reddening or even experience the skin breaking down and in some situations, a severe burn and weeping of the skin happens. There is an increase in radiation delivered to some of these areas of the breast that do not need that much radiation, and with that, comes some unnecessary skin reactions that a woman should not have to go through if at all possible.

This is where IMRT comes into play.

IMRT is made up of many tiny little beams about the size of a pencil referred to as beam-lets. These beam-lets can be thought of like an older dot matrix printer. In using all of these small little numerous beam-lets, to form one larger beam, it allows the physician and the dosimetrist to develop a highly conformal and precise delivery of radiation to the patients.

Again in this picture (*Diagram4*) you can see the difference between the two plans. The one of your left is the typical conventional plan and the one on your right is the IMRT plan. You can see first hand how the IMRT plan on the right allows the radiation oncology team to focus the field more intensely on the tumor area itself and limit the dose to nearly normal tissues.

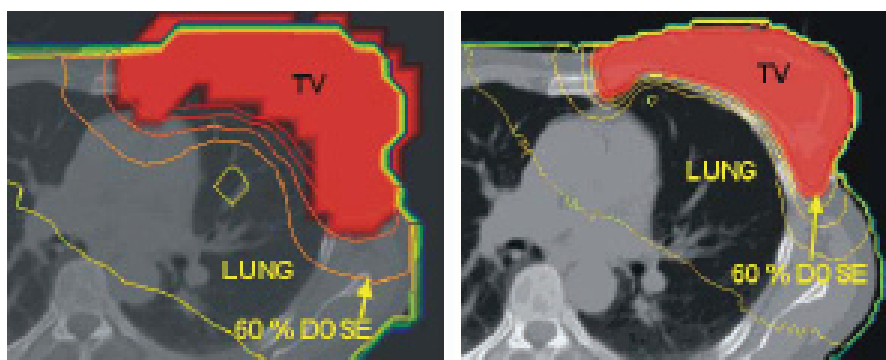


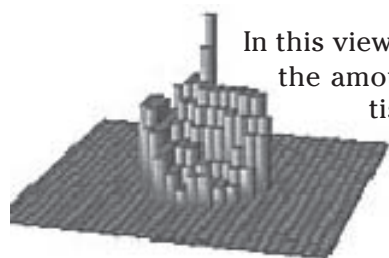
Diagram 4

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In order to accomplish this, the physician needs to plan ahead and really think through his outcome that he ideally would like for the patient. The physician will have to look at all the scans, and then actually sit down at a computer and contour, or draw over all of the breast tissue that he wants to be treated. He will then also need to draw other areas of interest that he may want to avoid, such as the lung or the heart if a left sided breast cancer. At times physicians will also make sure to draw a separate area around the lumpectomy cavity, where the tumor was removed. This is to make sure that this area received a bit more radiation then the rest of the breast tissue. The rationale is that close to 85% of the time if a patient is going to recur, its going to be locally at the sight where the original tumor was located.

Once this is all done, the computer is then put to work to develop a plan that will achieve all of the physician's desired outcomes and taking into consideration the limitations that the physician also wants to consider. For example, the physician wants the entire Breast to be treated to a dose of 50.4cGy, and wants the lumpectomy area to get a bit more radiation, and go to a dose of 60.4cGy. Perhaps the physician wants to limit the amount of radiation to the heart to less then 10% of the total dose, and wants there to be no hot spots greater then 5mm in any dimension. The computer takes all of this into consideration, and the dosimetrist helps to maneuver the plan in order to get the outcomes that the physician wants for his patient.

What happens is that a plan is generated that allows little deposits of varying doses to be places all along the breast tissue in order to achieve the type of outcome and plan that the physician would ideally like for his patient. It may look something like this (**Diagram 5**)



In this view, you can see the different columns are at different heights. This represents the amounts of radiation being deposited in any one particular area of the breast tissue. The largest columns may be right at the original sight of where the tumor was located. The area that is the shortest in height may be at the underside of the breast, where a skin reaction is most likely to occur. In doing this, it allows the radiation to be "painted" onto different areas within the breast tissue at different intensities.

Diagram 5

So why is all of this important and why do we need Breast IMRT?

1. **More conformal dose to the Breast:** The natural taper of the breast produces hot spots in ranges of 3% to 20%. Even with the use of wedges, these hot spots are still very noticeable and can still produce some substantial side effects for patients. IMRT can drastically reduce these hot spots.
2. **Lower dose to the Heart and Lungs:** Dose is fairly low in all cases on left sided breast cancers, however, with the use of IMRT the dose that is administered to the heart and lung can be lowered even more. In one study done abroad, it was shown that the dose to the left lung and ventricle could be reduced to less than 500cGy, or less then 10% of the prescription dose. In patients that have pre-existing conditions such as Congestive Heart Failure or decreased lung function; this improvement can be drastically significant in their overall health.
3. **Lower dose to the opposite breast:** In some recent data published be a group from the Netherlands and presented at ASCO, they took a look at 999 women that were previously treated for Breast Cancer. What they saw was that in women ages 40 years and younger, that they had an increase risk of developing Breast Cancer in their opposite breast by as much as 60%. IMRT can drastically reduce the amount of radiation being deposited to the opposite or unaffected breast in comparison to the scatter radiation it typically receives from conventional methods.
4. **Field with in a field:** The fact that IMRT allows physicians to increase the amount of radiation being deposited in a certain area means that a patient can receive their overall breast radiation as well as their boost to the tumor site at the same time. This decreases the overall number of times that a patient has to come in for their radiation treatments. This can be a bit more convenient for patients

Article courtesy of CANCERGEEK - Bringing HOPE to cancer patients & their families

ADVANTAGES OF SONOGRAPHIC IMAGING IN DIAGNOSING MUCINOUS CYSTADENOCARCINOMA

(This article is part of case study by Ms. Ravi Chanthriga Eturajulu)

Case Summary

A 52-year old female came to gynaecology clinic for an enlarging pelvic mass. On examination, a large palpable mass was noted arising from the pelvis. The patient also experienced weight loss and frequency in urination for the same period of time. An ultrasound was done and was diagnosed as mucinous cystadenocarcinoma, a type of ovarian cancer.

Introduction

Ovarian cancer is a cancer of the reproductive organs of a female in which the ova or eggs are formed (Cancer Source, 1999, [online]). It is the fourth most frequent cancer, which causes death in women after lung, breast and colon (Hughes-Watkins, 2001, [online]). Ovarian cancer, which seems to be the “silent killer”, is usually asymptomatic in the early stages (Hughes-Watkins, 2001, [online]). Unfortunately diagnosis is usually made with this disease at an advanced stage due to late detection. Therefore they are responsible for almost half of the deaths from cancer for women accounting for a disproportionate number of fatal cancers, (Gynaecologic Pathology, [online]).

Ovarian cancer is mostly common amongst women aged 50-59 and is quite uncommon amongst women under 35 (Cancer Source, 1999, [online]). A study by Nova (online) stated that, 60% of patients with ovarian cancer are between 40-60 years, 20% younger than 40 and 20% older than 60.

Some of the possible signs of ovarian cancer include stomach swelling, bloating or discomfort. Other signs include loss of appetite, indigestion, gas with concomitant distension, nausea, frequency of urinating, anxiety and losing or gaining weight without any apparent reason. Due to the similarities of signs with other types of cancer, a good clinical history is important in order to arrive to a definite diagnosis (The National Women's Health Information Center, 1999, [online]).

Mucinous cystadenocarcinomas tend to be very large, usually measuring 15-30 cm in diameter. It is a multiloculated cystic lesion and usually contains echogenic material, within which complex solid and cystic masses, haemorrhage and necrosis are commonly present and with thickening of the wall, it is usually suggestive of malignant cysts. Papillary projections sticking into the lumen or on the surface are less frequently seen in this type of cystadenocarcinoma (Lyons and Najimi, [online]). The rupture or penetration of the tumour capsule may lead to intraperitoneal spread of mucin-secreting cells known as pseudomyxoma peritonei, which appears to have similarity to ascites sonographically (Mani, Sood and Suri, 2001, Lyons and Najimi, [online]).

Although there is no standardised test that exists to reliably detect ovarian cancer, still, there are several procedures that may help detect the disease. They include pelvic examination, imaging examination such as ultrasound, Doppler ultrasound studies, CT and MRI scan, intravenous urography, barium enema, gallium imaging, laparoscopy and lab studies such as cancer antigen (CA) 125 blood tests and biopsy (Barber, 1993).

The detection of a truly early ovarian cancer is not possible by pelvic examination. This is because tumours cannot be palpated abdominally until they reach approximately 15 cm in size; hence the pelvic findings are often minimal or uncertain even in patients with advanced disease (Barber, 1993). In this context, ultrasound plays an important role in detecting pelvic masses.

Ultrasonography

Ultrasonography is a useful method of imaging. It has many advantageous characteristics and remains attractive due to the relatively low costs and noninvasiveness. A lack of radiation exposure, wide availability, multiplanar imaging and its ability to characterise tissue as solid or cystic, makes it a very useful diagnostic tool.

The ovaries are easily detectable in ultrasound. The practitioners of ultrasound modalities may favour transvaginal ultrasonography to transabdominal for better visualisation of ovaries. However the goal of an examination is not the simple visualisation of ovaries only but complete evaluation of the pelvis. When an ovarian mass is detected there might be other ancillary features to look for such as hydronephrosis, ascites, liver metastases, peritoneal metastases and/or pleural effusion (Filly, 1994).

Sonography cannot distinguish malignant and benign neoplasm accurately in order to avert surgery. Although this is one of the pitfalls, sonography is still useful to provide information (Filly, 1994).

Ideally, the expert sonologic practitioners should evaluate the imaging problem and then select the transducer or transducers that give the maximum diagnostic information (Filly, 1994). The most suitable transducer for general work, which, include the upper abdomen and the pelvis region, usually for gynaecological reasons is a convex or a sector footprint transducer of 3.5 MHz focused at 7-9cm (Palmer, 1995).

With regards to attenuation in ultrasound, it is important to know that the tissues in the body absorb and scatter ultrasound in different ways. For instance, higher frequencies are more readily absorbed and attenuated than lower frequencies. Therefore, in order to reach deeper tissues, it is important to use lower frequencies due to the waves

being less likely to be diverted as they traverse intervening structures. A fair compromise between penetration and resolution would be a 3.5 MHz frequency transducer (Palmer, 1995).

Ultrasonographically, Palmer (1995) explains that, the ovaries are less homogeneous than the uterus but with the same or slightly less echogenicity there will often be distal acoustic shadowing. Sometimes, the ovaries may blend into the surrounding parametrium if the gain setting is too high, which makes it difficult to identify; hence proper gain settings is crucial to overcome this problem.

The field of diagnostic sonography faces its own legal concerns too, as in all other medical disciplines (Oak, 2002, [online]). Whenever any special procedure such as transvaginal sonography is to be performed, it would be only appropriate that the physician discusses the relatively non-invasive method to the patient, for instance the requirement of a hand-held probe to be inserted into the vagina to gain cooperation from the patient and to prepare psychologically due to the nature of the examination in order to help with reaching a diagnosis of ovarian cancer (Helm, 2002, [online]).

The major biological effects of ultrasonography, which causes adverse health effects, are believed to be thermal causes and cavitations, as stated by Callen (1994). The thermal effects of ultrasound are due to heating and dependent upon the acoustic energy delivered per unit time to a particular tissue area and the duration of examination (Amersham Health, 2003, [online]). In terms of diagnostic exposure, a temperature rise of no more than 1.5°C above normal physiological levels (37°C) may be used clinically without reservation (World Federation for Ultrasound in Medicine and Biology, 1996, [online]). Harmful cavitations effects can create oscillations due to the action of an ultrasound wave on small gas bodies and this may cause mechanical stress in tissue (Haar, 1996). However, all these may not be a cause for concern in diagnostic ultrasound as the examination is usually fast and short.

With regards to ultrasound of the pelvic cavity, Holt et al. (1994) stated, it is important to know the structure of the pelvis, which is arbitrarily divided into two structurally continuous compartments: the true pelvis and false pelvis. In the case of transabdominal scanning, generally a full bladder is required to displace small bowel out of the true pelvis into the false pelvis compartment to provide a "sonic window" in order to view the contents.

It is easy to image the ovaries in different cephalo-caudad locations, since the ovaries, which are relatively mobile in the pelvis tend to lie more cephalad when the bladder is distended. When the bladder is empty, through transvaginal imaging, the ovaries are more frequently detected lateral to the body of the uterus (Ritchie, 1994). However, the transabdominal method may also inadvertently displace pathologic structures into the false pelvis.

The visualisation of the pelvic organ is also limited by body habitus owing to sonic attenuation of the intervening anterior part of the abdominal wall, the peritoneal and subcutaneous fat and fat in the omentum and mesentery. Due to this attenuation and distance from the area of interest from the anterior abdominal wall, it is not possible to use high frequency transducers; hence the 3.5 MHz transducer is more ideal than the 5.0MHz, as stated by Holt et al. (1994)

In assessing the female pelvis, the amount of information attainable has been increased with the advent of transvaginal scanning. It is being used frequently to augment the traditional transabdominal method of scanning the pelvis through the distended urinary bladder. Patient acceptance of transvaginal scanning has increased comparatively because it obviates the need of full bladder (Holt et al., 1994). Due to the nature of the pelvic mass and the tendency to urinate frequently, to retain a full bladder for some time might be a difficult thing for the patient in this case study. Therefore, the transvaginal method might be more appropriate in order to achieve some form of diagnosis.

Holt et al. (1994) further added that, although the transvaginal method has advantages in certain respect, it has also disadvantages due to the limited field of view especially to see the extent of the ovarian cancer and the inability to examine the false pelvis adequately. Therefore a method of quick scans of the true and false pelvis at the end of ultrasound post void should be a routine to allow detection of large masses that have been displaced by the full bladder and masses that mimic a full bladder. It is often necessary to use compression to displace gas in loops of small bowel and colon, especially when searching for a small mass in the false pelvis. The bowel gas interference generates echoes ultrasonographically that obscures pelvic anatomy and pathology (Barber, 1993).

It is a good practice to first scan transabdominally through a distended urinary bladder and then transvaginally when appropriate. This approach, although more time consuming, has no drawbacks. Under the circumstances, the technique can be modified towards a greater emphasis on transabdominal or transvaginal scanning when it requires (Filly, 1994).

The Doppler flow ultrasound studies is important to determine the characterisation of ovarian malignancy, which can identify the blood flow within a cyst wall and adjacent areas, that include the tumour surface, septa, solid parts within the tumour and the peritumorous ovarian stroma. Due to the lack of developed smooth muscle in the walls, the new vessels within tumours have lower resistance to blood flow, which can be quantitated into a resistance index (RI) or pulsatility index (PI) (Helm, 2002, [online]). Study conducted by Taori et al. (2002, [online]) in establishing the pre-operative diagnosis

of benign and malignant adnexal masses prevailed, B-Mode ultrasonography in combination with colour and spectral Doppler establishes multifold increase in the sensitivity, specificity, positive and negative predictive values. Therefore it is proposed as the first and foremost diagnostic modality, which will go a long way in establishing an early and definite diagnosis of ovarian malignancy, which is of grave clinical importance.

The role of Magnetic Resonance Imaging

The role of MRI in detecting pelvic malignancies is still evolving. Although ultrasound still remains the initial modality in evaluating clinically suspected gynaecologic disease judging from its relative safety and lower cost, there may be limitation due to its operator dependence, patient's body habitus, low signal-to-noise-ratio and is inadequate in staging for pelvic malignancies (Callen, 1994). In view of these, MRI offers supplemental diagnostic information in cases of suboptimal or equivocal ultrasound examination. MRI with gadolinium contrast allows clearer visualisation of lesions, which is indeterminate on ultrasound. It also gives better demonstration of soft tissue contrast than CT scan, particularly in identifying fat and blood products and a better idea of the organ of origin of the tumour (Helm, 2002, [online]). It is superior in lesion detection and also useful in differentiating benign from malignant ovarian lesions and characterisation, thus giving an accuracy of 95%, as well as evaluation of extraovarian spread of tumour within the pelvis and to the abdomen (Callen, 1994). However, there are also some disadvantages of MRI scanning, which are the long scanning time, the high cost of the equipment and the claustrophobic tendency of the nature of the examination (Barber, 1993).

Computed tomography

In the case of diagnostic difficulty in ultrasonography, CT scan can be used to compliment this (Kerbrat et al., 2001, [online]). CT facilitates examination of the abdominal contents and retroperitoneum in cases of malignant ovarian disease, especially to view the intraperitoneal spread of tumour and to view the extensiveness of the carcinoma (Helm, 2002, [online]).

Other diagnostic tests

Other diagnostic tests sometimes include imaging of the lower gastrointestinal tract such as barium enema, which is a procedure used to show tumours or other abnormal areas in the pelvis (National Cancer Institute, 2002, [online]). This is useful to determine if the disease has spread to other organs (Mayo Clinic, 2002, [online]). Intravenous urography, which is a series of radiographs of the kidneys, ureters and bladder, is sometimes done to help to determine if cancer has spread outside the ovaries (National Cancer Institute, 2002, [online]).

Gallium imaging has been useful for the detection and localisation of occult abscesses but has limitations due to the poor spatial resolution. Although sensitivity is high in gallium scanning, abdominal imaging with CT for tumour is faster and more specific, making this imaging method to be secondary to other modalities (Barber, 1993). Despite the limited value as a diagnostic modality in patients with ovarian cancer, laparoscopy has been found to be useful for staging suspected ovarian cancer patients and for the follow-up of these patients after clinical remission and chemotherapy (Barber, 1993).

In women who had the disease previously, one test, which is used primarily to check the recurrence of the ovarian cancer, is the CA 125 assay (Urban, 1999). It is a protein expressed on the cell membrane of normal ovarian tissue and ovarian carcinomas. An increased level of CA 125 is most useful in conjunction with ultrasound in the assessment of a postmenopausal woman with an ovarian cyst in determining malignancy (Helm, 2002, [online]).

Besides the blood tests, biopsy, which is a removal of tissue in a procedure called laparotomy, can also be done for the purpose of examination under the microscope (National Cancer Institute, 2002, [online]). Sonography is not a substitute for laparotomy and biopsy in a suspected tumour case (Barber, 1993). Diagnostic laparoscopy may sometimes be necessary to inspect a suspected adnexal cystic mass but occasionally it may miss an intraovarian malignancy. However, histologic findings give a more definitive diagnosis of ovarian cancer (Helm, 2002, [online]).

There was no common language for the histological classification or clinical staging until the International Federation of Gynaecology and Obstetrics (FIGO) established them, which provided a more accurate method for evaluating results (Barber, 1993). The most common mode of spread of ovarian carcinoma is by peritoneal implantation (Family Medicine Genetics, 2002, [online]). The stages of this disease are determined by the spread of the cancer to the confined areas. For instance, Stage I is confined to ovary or ovaries, Stage II confined to pelvic cavity, Stage III means extension to the cavity of abdomen and Stage IV means distant metastases (Sanders, [online]). At Stage I and Stage II, the chance of remission for a period of long term may be as high as 95%; therefore vigilant screening is vital, particularly for women with increased risk (Harris, 2002, [online]).

Treatment

With regards to treatment regime in ovarian epithelial cancer, three kinds of standard treatment can be used, which usually involves a combination of surgery and chemotherapy and occasionally radiation therapy (Mayo Clinic, 2002, [online]). Surgery is the initial treatment option for almost every woman with ovarian cancer, usually

hysterectomy with bilateral salpingo-oophorectomy. Efforts of optimal surgical cytoreduction (tumour debulking) in patients with advanced stage diseases should precede chemotherapy routinely (The James Line, [online]). Barber (1993) stated that, ultrasonography is used to evaluate the position and volume of tumour; and if disease is identified with this technique, ultrasonography is employed to monitor therapy. In addition, ultrasonography is also useful in monitoring response to treatment.

Ovarian cancer is often deadly and due to the subtle signs and symptoms, knowing them is crucial in detecting the disease as early as possible leading to increased chances of survival (Mayo Clinic, 2002, [online]). In the change of millennium the problems associated with it are also evolving (Oak, 2002, [online]). Therefore the need for new therapeutic strategies is paramount (Vasey, 2001, [online]). With the widespread application of ultrasonography as a primary diagnostic modality by clinicians in the detection of ovarian cancer, the responsibility of arriving at an accurate diagnosis is also increasing (Oak, 2002, [online]).

Summary

Ultrasonography has evolved to be the gold standard in making diagnostic acumen and decisions faster and with greater confidence (Callen, 1994). Over the years, technology advancement and the understanding of normal and abnormal findings finally made this a remarkable frontier in clinical diagnosis. Although this advancement has placed a bigger burden on the sonographers, nevertheless, the quest for knowledge would never stop mankind from developing and reaching out for something new that would dramatically give more clinical information and hence alter patient management.

References

- Amersham Health, (2003) Biological Effect of Ultrasound. *The Encyclopaedia of Medical Imaging Volume I* [online]
[http://www.amershamhealth.com/medcyclopaedia/Volume%20I/BIOLOGICAL%20\(13/02/2003\)](http://www.amershamhealth.com/medcyclopaedia/Volume%20I/BIOLOGICAL%20(13/02/2003))
- Barber, H. R. K. (1993) *Ovarian Carcinoma Etiology, Diagnosis and Treatment*. 3rd edition, New York, Springer- Verlag
- Callen, P.W. (1994) 'Artifacts, Pitfalls and Normal Variants' Do' in Callen, P.W. (ed) *Ultrasonography In Obstetrics And Gynecology*. 3rd edition, pp. 689-718, United States Of America, W. B. Saunders Company.
- Callen, P.W. (1994) 'The Obstetric Ultrasound Examination' in Callen, P. W. (ed) *Ultrasonography In Obstetrics And Gynecology*. 3rd edition, pp.1-14, United States Of America, W. B. Saunders Company.
- CancerSource.com Glossary (1999) *Ovarian Cancer [Ovarian Epithelial Cancer]* [online]
<http://www.cancersource.com/Resources/glossary/detail.cfm?ID=1865> (13/12/2002)
- Family Medicine Genetics (2002) *Ovarian Cancer* [online]
<http://www.mtsinai.on.ca/familymedicine/genetics/Disorders/ovarian.htm> (13/12/2002)
- Filly, R. A. (1994) 'Ovarian Masses... What to Look for... What to Do' in Callen, P.W. (ed) *Ultrasonography In Obstetrics And Gynecology*. 3rd edition, pp. 625- 640, United States Of America, W. B. Saunders Company.
- Gynaecologic Pathology, Slide 327: *Mucinous Cystadenocarcinoma of the Ovary* [online]
<http://www.uvm.edu/~jkessler/GYN/GYNSB/Slide327/327answe.htm> (28/01/2003)
- Haar, G. T. (1996) Commentary: Safety of Diagnostic Ultrasound. *The British Journal of Radiology*, 69, 1083-1085
- Harris, L. L. (2002) Ovarian Cancer: Screening for Early Detection: Thousands of women are living longer with ovarian cancer. Early detection is the key to improving survival rates. *American Journal of Nursing*, Volume 102(10), pp. 46-52 [online]
<http://gateway2.uk.ovid.com/ovidweb.cgi> (10/02/2003)
- Helm, C. W. (2002) *Ovarian Cysts* [online]
<http://www.emedicine.com/MED/topic1699.htm> (12/11/2002)
- Holt, S. C., Levi, C. S., Lyons, E. A., et al. (1994) 'Normal Anatomy of the Female Pelvis' in Callen, P.W. (ed) *Ultrasonography In Obstetrics And Gynecology*. 3rd edition, pp. 548-568, United States Of America, W. B. Saunders Company.
- Hughes-Watkins, E. M. (2001) *Ovarian Cancer: Diagnosis and Screening in Primary Care* [online]
<http://www.view.vcu.edu/womenshealth/PPT/Ovarian.ppt> (17/01/2003)
- Kerbrat, P. et al. (2001) Standards, Options and Recommendations: Ovarian cancer. *Electronic Journal of Oncology*, 1, 32-42 [online]
http://www.fncclcc.fr/-sci/sor/eng_pdf/sor_cancer_ovarian.pdf (13/02/03)
- Lyons, E. A. and Najimi, N., *Case study of Mucinous Cystadenocarcinoma* [online]
<http://www.gemedicalsystems.com/inen/rad/us/education/msucase4.html> (05/12/2002)
- Mani, N. B. S., Sood, B. P. and Suri, S. (2001) Mucinous tumours. *The Indian Journal Of Radiology And Imaging*, 11:3:147-148
- MayoClinic.com (2002) *Ovarian cancer* [online]
<http://www.mayoclinic.com/invokc.cfm?id=DS00293> (18/02/2003)
- National Cancer Institute (2002) *Cancer Facts* [online]
http://cis.nci.nih.gov/fact/3_62.htm (18/02/2003)
- National Cancer Institute (2002) *Ovarian Epithelial Cancer* [online]
http://www.cancer.gov/cancer_information/doc_pdq.aspx?version=patient&viewing (18/02/2003)
- Nova, Lecture Supplement #30, *Ovarian and Adnexal Disease* [online]
<http://medicine.nova.edu/online/obgyn/HANDOUTS%202002/Lecture%20supplement%2030.doc> (28/01/2003)
- Oak, S. (2002) Eagle's Eye And Lion's Heart – Medicolegal Issues In Ultrasonography Practice. *The Indian Journal Of Radiology And Imaging*, 12:1:105-108 [online]
http://www.ijri.org/archives/2002-12-1/eagle_105.htm (23/02/2003)
- Palmer, P. E. S. (1995) *Manual of diagnostic ultrasound*, France, World Health Organisation.
- Ritchie, W. G. M. (1994) 'Ultrasound Evaluation of Normal and Induced Ovulation' in Callen, P. W. (ed) *Ultrasonography In Obstetrics And Gynecology*. 3rd edition, pp. 569-614, United States Of America, W. B. Saunders Company.
- Taori, K. B. et al. (2002) "Doppler Determinants of Ovarian Malignancy: Experience with 60 patients". *The Indian Journal Of Radiology And Imaging*, 12:2:245-249 [online]
http://www.ijri.org/current_issue/genitourinary_245.htm (28/01/2003)
- The James Line, *Treatment* [online]
<http://www.jamesline.com/output/content/cainfo/ovarhome/ovartreat.htm> (13/02/2003)
- The National Women's Health Information Center (1999) *Ovarian Cancer (Easy to Read)* [online]
<http://www.4woman.gov/faq/Easyread/ovarian-etr.htm> (18/02/2003)
- Urban, N. (1999) Screening for ovarian cancer. *BMJ*, 319: 1317-1318
- Vasey, P. A. (2001) *Treating Ovarian Cancer in 2001*, Medscape [online]
<http://www.medscape.com/viewarticle/418479> (13/02/2003)
- World Federation for Ultrasound in Medicine and Biology (1996) *WFUMB endorses new statement on ultrasound bio-effects in clinical applications* [online]
<http://www.efsumb.org/wfumb1.htm> (13/02/2003)

Preliminary Program

DAY 1 : BASIC INTERPRETATION

- Outline of X-ray mammography : physics, equipment, examination techniques and image reading
- Outline of Breast MRI : physics, equipment, examination techniques and image reading
- Breast Ultrasound : techniques, normal sonography and physiological changes
- Breast Ultrasound : artefacts and pitfalls
- Imaging and benign pathology correlation : microcalcifications, masses, asymmetrical densities and architectural distortion
- Imaging and malignant pathology correlation : microcalcifications, masses, asymmetrical densities and architectural distortion
- Imaging master class

DAY 2 : SPECIAL TOPICS AND NEW HORIZONS

- Recent Advances in Breast Imaging & Post-treatment Imaging of Breast Cancer
 - Ultrasound of Non-palpable Breast Cancers with Mammographically Detected Architectural distortion
 - Potential errors & Pitfalls in Mammography : How do we avoid them?
 - DCIS : Frequency Today & Earlier, DCIS diagnosed by Mammography, Galactography and Ultrasound
 - 3D - 4D Breast Ultrasound Imaging in patient with Nipple Discharge
 - Is Breast MRI Useful to Decide the Indication for Breast Conserving Surgery?
 - The role and new development of vacuum assisted Biopsy Devices
- WORKSHOP :**
- Axillary Ultrasound Findings in Breast Cancer
 - The sentinel node in Breast Cancer
 - The brachial plexus in Breast Cancer
 - PET in Breast Cancer

DAY 3 : THE 17th ANNUAL MEETING OF ISUM & 4th ANNUAL MEETING OF ISOI

FOCUS SESSION : Hepatobiliary-Pancreatic Tumours

- Hepatobiliary Cancer Imaging & Treatment : Response Evaluation and follow-up
- Post treatment Imaging of Liver tumours
- Biliary Tract Tumours : What's the clinician want to know
- Biliary Tract Tumours : Detection, Diagnosis & Staging
- The Practical Issues in Hepatobiliary-Pancreatic Cancer Surgery
- MSCT/MRI and PET Imaging in Lymphoma
- Pancreatic Adenocarcinoma: Diagnosis & Staging : Ultrasound, MSCT and MRI
- Colorectal Cancer: Diagnosis, Staging and Imaging Surveillance following resection of primary tumour
- The Practical Issues of Adjuvant and/or Neoadjuvant Chemotherapy of Colorectal Cancer
- New frontiers in Paediatric Oncologic Imaging

FOCUS SESSIONS: Head & Neck Neoplasms

- Head & Neck primary tumours : Treatment Evaluation & detection of recurrences
- Head & Neck Cancer : What's a Surgeon want to know?
- Multimodality Imaging of Head & Neck Cancer
- Salivary Gland Tumours : What is the role of High Resolution Ultrasound?
- Salivary Gland Tumours: MSCT and MRI
- What is new in Imaging of Thyroid Cancer

Faculty

Prof. Aryono D. Pusponogoro	Indonesia
A/Prof. Benjaporn Chaiwun	Thailand
Dr. Daniel Makes	Indonesia
A/Prof. Gary Tse	Hong Kong
Dr. Henry Naland	Indonesia
A/Prof. Hon-Shing Lam	Hong Kong
Prof. Humairah Cheung	Malaysia
Dr. Lui Chun Ying	Hong Kong
Prof. Malai Muttarak	Thailand
A/Prof. Puay Hoon Tan	Singapore
Dr. Philip Iau	Singapore
Prof. Shotaro Maeda	Japan
Prof. SC Wang	Singapore
Prof. Vincent Chong	Singapore
Prof. Yi-Hong Chou	Taiwan

ABDA Ltd Council

President
Dr. Daniel Makes (INA)
Vice President
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Assistant Secretary
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Prof. Shotaro Maeda (JP)
Prof. Humairah Cheung (MS)
Prof. Benjaporn Chaiwun (TH)
Prof. Malai Muttarak (TH)

- 1st ABDA Teaching Course, Jakarta, Indonesia, 2003**
- 2nd ABDA Teaching Course, Hongkong, 2004**
- 3rd ABDA Teaching Course, Kuantan, Malaysia, 2005**
- 4th ABDA Teaching Course, Chiang Mai, Thailand, 2006**
- 5th ABDA Teaching Course, Singapore, 2007**

ABDA is a Registered Company, registered in Hongkong
Registered No: 985275
Registered Office : Department of
Radiology, Kwong Wah Hospital, 25 Waterloo
Road, Kowloon, Hongkong
Registered as a Charity, IR File No: 9177635

FIRST ANNOUNCEMENT



The 6th Asian Breast Diseases Association (ABDA) Teaching Course

in conjunction with

The 17th Annual Meeting of
Indonesian Society of Ultrasound in Medicine
(ISUM)

&
4th Annual Meeting of
Indonesian Society of Oncology Imaging
(ISOI)

**Novotel Mangga Dua Square,
Jakarta, Indonesia**

Thursday, 20th – Saturday, 22nd
November, 2008



Asian Breast Diseases Association Ltd (ABDA)

ABDA is a multidisciplinary organizations which goal are to advance, promote, facilitate, support and assist the diagnosis, imaging of and treatment of breast diseases in related fields of medicine and science, to promote, facilitate, support and advance the exchange of views, dialogue, sharing, understanding of and between medical practitioners and professionals, including radiologists, surgeons, pathologists, oncologists, radiographers, nurses as well as other breast disease professionals and researchers in Asia and other parts of the world.

For further information please visit the Society website : www.abda-breast.org

**Multidisciplinary Symposia - Keynote Lectures -
Special Focus Sessions - Workshop &
Poster Exhibition with Awards**

About the Course

The 6th ABDA Teaching Course will focus on the clinical role of imaging in breast cancer patients and new techniques that will aid clinical decision-making and improve outcomes.

This course will be held in conjunction with the 17th Annual Meeting of Indonesian Society of Ultrasound in Medicine and 4th Annual Meeting of Indonesian Society of Oncology Imaging, therefore this course also will focus on the role of Ultrasound in Cancer patients and Imaging surveillance following cancer treatment & treatment response evaluation.



Organizing Committee

Chairman
Dr. Daniel Makes

Secretary
Dr. H. Sidharta

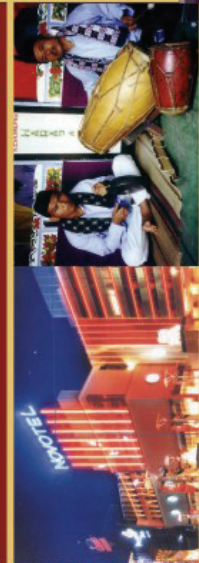
Treasurer
Dr. Yeyes Tantiani Widjaja

Scientific
Dr. Nina ISH Supit
Dr. Masie ME Johan
Dr. I Wayan Murna Yonathan

Audivisual
Dr. S. Hindarto Gunawan

Meeting Venue

Novotel Mangga Dua Square
Jakarta, Indonesia
Jl. Gunung Sahari Raya No. 1, Jakarta 14420,
Indonesia
Tel : (62-21) 62312800
Fax : (62-21) 62312900
E-mail : reservation@novotelmangga2.com
www.novotel.com/asia



Jakarta is the main gateway to Indonesian archipelago.

It is a contrast of modern western architecture and traditional Indonesia culture. Its rapid growth into a metropolitan city, however, is a reflection of the economic, political, social and industrial development of the nation.

The Novotel is part of a large and modern shopping, entertainment, exhibition, wholesales as well as retail complex. Mangga Dua Square is close by and within 15 minutes walk to ITC as well as Pasar Pagi. Close to the coast, Ancol Dreamland with Sea World, Fantasy World, entertainment and leisure facilities as well as close to Jakarta Fairground and Exhibition Center in Kemayoran.

Secretariat Office

Medical Ultrasound Training Centre
LPUK-USG Building 1st – 3rd floor
Jl. Radio Dalam Raya No. 1B
Kebayoran Baru, Jakarta 12140, Indonesia
Tel : (62-21) 7230060, 7258135
Fax : (62-21) 7230061
E-mail : isum@centrin.net.id /
intitum@cbn.net.id
<http://www.puski.org>



Registration Form

Title (Prof/Dr/Mr/Ms) :

Name : _____
Address : _____
Institution : _____
City : _____ Country : _____
Zip Code : _____ Fax / HP : _____
Email : _____

OVERSEAS PARTICIPANTS	Before Sept 30, 2008	After Sept 30, 2008	On Site
MD	US\$ 200	US\$ 250	US\$ 300
NON MD / TRAINEE	US\$ 150	US\$ 200	US\$ 250

INDONESIAN PARTICIPANTS	Before Sept 30, 2008	After Sept 30, 2008	On Site
GP	Rp. 800.000	Rp. 1.000.000	Rp. 1.200.000
NON MD / TRAINEE	Rp. 700.000	Rp. 900.000	Rp. 1.100.000
SPECIALIST	Rp. 1.000.000	Rp. 1.200.000	Rp. 1.400.000

METHOD OF PAYMENT

☐ Cash

☐ Transfer in Indonesian Rupiah
(please copy in the bank transfer transaction in order to avoid difficulties)

Bank Name : BNI Cabang UI Depok
Account Name : PETRAKOSJA
Account Number : 6695814
Bank Address : Jl. Salemba Raya 4
Jakarta 10430, Indonesia

☐ Transfer in US Dollar

Bank Name : BNI Cabang UI Depok
Account Name : Dr. Daniel Makes
Account Number : 6700596
Swift Code : BININDJID
Bank Address : Jl. Salemba Raya 4
Jakarta 10430, Indonesia

- We don't accept personal cheques or bank draft
- Payment by credit card is not available

Cancellation and Refund

Registration Fee : There will be a 50% charge for written cancellation made before 15 October. There will be no refund for request received after that date.

"Our Vision Today, Reality Tomorrow"

23rd Singapore - Malaysia Radiographers' Conference

6-7 September 2008 @ Orchard Hotel, Singapore

Email: 23smrc@gmail.com

URL: www.ssr.org.sg

OFFICIAL REGISTRATION FORM

Particulars (Please fill in all fields)

Title	Prof / Dr / Mr / Ms / Mrs / _____		
Full Name	_____		
Institution	_____		
Designation	_____		
Address	_____		
Country	_____	Postcode	_____
Telephone	_____	Fax	_____
Email	_____		

Registration Fees (Please tick the appropriate categories)

Conference Attendees	
<input type="checkbox"/> SSR / MSR Member (Before 31 Jul 08)	S\$350
<input type="checkbox"/> Other affiliated Society Member (Before 31 Jul 08) *	S\$400
<input type="checkbox"/> Student Member (Before 31 Jul 08)	S\$200
<input type="checkbox"/> Late registration (After 31 Jul 08) / On-the-spot registration	S\$450
<input type="checkbox"/> Non-Member	S\$450
Social Attendees	
<input type="checkbox"/> Social (Golden Jubilee Gala Dinner only)	S\$150

NB: All conference fees include the Golden Jubilee Gala Dinner

* Members of Radiography Societies from other countries

Payment

- ☐ Cheque (Singapore Dollars)
☐ Bank Draft (Singapore Dollars)

Cheque and Bank Draft to be made payable to:
"Singapore Society of Radiographers"

Refund Policy

The following cancellation and refund policy will apply

Before	31-Jul-08	50%
After	31-Jul-08	Nil

Important Information

1. SSR members with outstanding arrears shall be charged the rate of non-members. Membership status shall be verified by the Executive Council.
2. Registration will be confirmed only upon receipt of payment. Proof of postage is not proof of receipt.
3. Email completed group registration form to 23smrc@gmail.com & mail cheque/bank draft to: Ang Mo Kio Central Post Office, P.O. Box 765, Singapore 915609
4. Conference registration acknowledgment & name badges will be sent to delegates upon receipt of completed registration form & full payment
5. The Organising Committee reserves the right to make changes to any of the above & its decision is final.

IMPORTANT INFORMATION

REGISTRATION

Please complete this form in BLOCK print and forward it together with your payment to:

The Secretariat
23rd SMRC
Ang Mo Kio Central Post Office
P.O. Box 765
Singapore 915609

Registration will be confirmed only upon receipt of payment. Proof of postage is not proof of receipt.

All enquiries should be directed to The Secretariat via email: 23smrc@gmail.com

MEMBERSHIP

SSR members with outstanding arrears shall be charged the rate of non-members. Membership status shall be verified by the Executive Council, whose decision is final.

SOCIAL ATTENDANCE

Registered social attendees will be admitted to the Golden Jubilee Gala Dinner on 6 September 2008 only. They will be ineligible to attend other events of the conference.

For Official Use Only:

Member: _____ Reg'n: _____

Cheque: _____ Receipt: _____

Tentative Programme:

Pre-Conference: 5 September 2008 (Fri)

Joint SSR-MSR Council Meeting

Day 1: 6 September 2008 (Sat)

0830	Registration open
0900	Poster Presentation
0930	Workshop
1200	Lunch
1345	Delegates to be seated
1400	Opening Ceremony
1430	K. Vaithilingam Memorial Lectures by Keynote Speakers - Prof Mary J. Lovegrove (Diagnostic Radiography) - Dr Jennifer Cox (Radiation Therapy)
1530	Tea break
1600	Theme Papers
1730	<i>Academic session adjourned</i>
1930	SSR Golden Jubilee Gala Dinner

Day 2: 7 September 2008 (Sun)

0830	Students' Conference
1000	Tea break
1030	Proffered Papers
1230	Closing Ceremony
1300	Lunch
1400	End of Conference

Hotel Information

Hotel rates & booking form will be made available soon at the SSR website.

Registration

Email 23smrc@gmail.com for an electronic copy of the registration form

Abstract Submission Guidelines:

1. Abstract must be submitted in English, typewritten with font size 12 point in Times New Roman (preferred).
2. Abstract must be submitted with the official conference registration form.
3. TITLE must be brief, concise and in CAPITALS.
4. MAIN AUTHOR – Type in your name, institution and job title, and your final qualification (DIP, BSc, MSc, PhD) as you want it to appear in the programme.
5. CO-AUTHORS – Type names and degrees as per instructions above.
6. Please indicate category of submission in the relevant box(es). Guidelines for each category is as follows.
 - a. *Theme Paper*
 - Paper must be closely related to the conference theme in your field of expertise – Theme Paper submission is open to all professionals.
 - b. *Proffered Paper*
 - Paper can be on any topic which is related to Radiography or Radiation Therapy including Information Technology and Radiology Management
 - Proffered Paper submission is open to all professionals.
 - c. *Student Paper*
 - Student Paper is the final year project completed as part of the Radiography or Radiation Therapy training at a diploma or undergraduate level.
 - Participants in the Student Conference must be final year students or recent graduates (within 18 months of graduation) from their institutions of Radiography or Radiation Therapy training in Singapore and Malaysia only.
 - The Student Conference is not an inter-institutional competition among Radiography and Radiation Therapy training centres in Singapore and Malaysia
 - The Best Student Paper Prize will be awarded to the best presented paper at the Student Conference.
 - The Judges decision is final and no correspondences will be entertained.
 - d. *Poster*
 - Please do not submit your poster together with the abstract – Poster submission is open to all professionals
 - Accepted submissions will be advised on the poster requirements at a later date.
7. Abstract text must not exceed 250 words.
8. Abstracts should include at least these 4 main headings. Purpose, Methods, Results and Conclusion.
9. In submitting the abstract, the author(s) give permission to the Organisers to record and publish the presentation at the above-mentioned conference and related publications.
10. Presenting authors must attend the conference as register as full paying delegates.
11. Authors of accepted abstracts will be contacted by the Academic Committee within a month from the abstract submission deadline.
12. Please do not submit full papers and posters together with the abstracts. The Academic Committee will not be responsible for any loss of original materials submitted. Instructions on presentation and poster requirements will be advised upon acceptance of abstracts.
13. Acceptance of papers shall be purely based on merit. The decision of the Academic Committee is final.
14. Please send 3 copies of the abstract and a soft copy in a CD-ROM by post or by e-mail to :

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Ang Mo Kio Central Post Office
P O Box 765
Singapore 915609
Tel (65) 94761474 Fax (65) 62241407
Email: 23smrc@gmail.com
15. The deadline for abstract submission for all categories is **15 June 2008**.