



Rajiv Gandhi Cancer Institute and Research Centre

A Unit of Indraprastha Cancer Society
Registered under "Societies Registration Act 1860"

Architect's Impression of RGCI & RC (post expansion)



News Letter

Vol. XVII

No. 6

Price: 50 Paisa

EDITORIAL

RELEVANCE OF THE HIPPOCRATIC OATH

The Hippocratic Oath is a professional oath which is a promise of fealty. The Hippocratic Oath is a symbolic act of commitment of ethical practice in general. Do you think people with different ethical values and moral perspectives should take similar Oath? Most professionals feel that Hippocratic Oath is a promise only, not a guarantee that what is promised is itself morally right. Though there is a lot of tradition behind the Hippocratic Oath, much more critical attention has been paid to its contents in more recent times. There have been many revisions intending to make the oath more relevant.

Modern Text of Hippocratic Oath

I swear to fulfill, to the best of my ability and judgment, this covenant:

I will respect the hard-won scientific gains of those physicians in whose steps I walk, and gladly share such knowledge as is mine with those who are to follow.

I will apply, for the benefit of the sick, all measures which are required, avoiding those twin traps of over-treatment and therapeutic nihilism.

I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug.

I will not be ashamed to say "I know not", nor will I fail to call in my colleagues when the skills of another are needed for a patient's recovery.

I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know. Most especially must I tread with care in matters of life and death. If it is given me to save a life, all thanks. But it may also be within my power to take a life; this awesome responsibility must be faced with great humbleness and awareness of my own frailty. Above all, I must not play at God.

I will remember that I do not treat a fever chart, a cancerous growth, but a sick human being, whose illness may affect the person's family and economic stability. My responsibility includes these related problems, if I am to care adequately for the sick.

I will prevent disease whenever I can, for prevention is preferable to cure.

I will remember that I remain a member of society, with special obligations to my fellow human beings, those sound of mind and body as well as the infirm. (Written in 1964 by Louis Lasagna)

The important question for moral medical practice is not "what is in the Hippocratic Oath?" but rather "what is right practice in general, on fundamental moral grounds?" Oath is not binding under law; it does not offer an avenue for practical action. The Hippocratic Oath actually serves as a contract for doctors to work towards the benefits of health of the society. Important tenets of this Oath include maintaining the integrity of the doctor, ensuring consent of patients, preventing the exploitation of patients, maintaining privacy and discretion and forbidding deadly drugs and the act of playing God.

CHANGING SCENARIO

1. There is a conflict between the original Hippocratic Oath and general practice of terminating life - supportive treatments. It requires the physician to use food and water for benefit of sick and prohibits physician assisted suicide. We now realize that patient's autonomy and the use of medical procedures to promote patient values and choices is a higher ethical standard than those encapsulated in the Oath. Even euthanasia has been legalized in some countries strongly emphasizing patient's autonomy
2. Hippocratic Oath does not ban abortion as such, but it prohibits surgery by those who are not experienced at it. Unfortunately abortions are being demanded by few for selective female foeticide which is immoral and unethical
3. There are outmoded passages in original Oath - "Greek Gods, no Surgery, no sex with slaves" - we need to ignore these as merely vestigial
4. Original Hippocratic Oath read "to hold him who has taught me this art as equal to my parents if he is in need of money to give him a share of mine". Unfortunately most clinicians in big corporate hospitals charge their teachers, colleagues, seniors and their children for medical services rendered. There is medical commercialization
5. How many of us over-treat, over-investigate for the benefit not of patients but of themselves. How many of us don't feel ashamed to say "I don't know, I will consult my colleague", are other issues to be introspected
6. In view, of the universal degradation of morality in the society, the traditional administration of an ethical Oath is beginning to lose moral force. Hippocratic Oath has ceased to be a moral force or a guiding ideal for many doctors. Many see Oath taking as little more than a proforma ritual with little value beyond that of upholding tradition

Young Docs! Don't memorize Hippocratic Oath but follow some basic moral principles

- i) Respect for autonomy - patient has the right to refuse or choose his treatment
- ii) Beneficence - act in the best interest of the patient
- iii) Nonmaleficence - "first, do no harm"
- iv) Justice - distribution of scarce health resources (equality)
- v) Respect for persons - treat patients with dignity
- vi) Truthfulness and honesty - concept of informed consent

Let us endorse the obligations of Hippocratic Oath and bind ourselves to uphold its terms!

Dr. Dewan A. K.
Medical Director

INTERVENTIONAL ONCOLOGY: R F ABLATION IN LIVER AND BEYOND

Traditionally cancer has been treated by surgery, chemotherapy and radiotherapy. However, Interventional Oncology has emerged as a new discipline offering effective treatment of many malignant tumours with the help of interventional radiology techniques. In selected cases, Interventional Oncology achieves the destruction of tumours with fewer complications and more rapid recovery than traditional surgical methods. It also greatly contributes to the palliation of cancers, making it the fourth arm of cancer management alongside radiation oncology, surgical oncology and medical oncology.

In Interventional Oncology, it is essential to show how it compares to other options in terms of outcomes and costs. In reality it is not a competitive but complementary tool in oncology. A systematic collection of data is essential in order to enable evidence-based decision making. There are also issues relating to training and practice. In this article, we will review the current practice of R F Ablation in Oncology.

In radiofrequency ablation a high frequency current (400 to 900 KHz) is delivered to the tumor tissue via a needle electrode. This causes frictional heating of the tissue (resistive heating) and cell death by coagulative necrosis.

Current Oncology applications of R F Ablation

Current indications for RFA include colorectal metastases to liver, HCC which is not suitable for surgery, bone metastases for control of pain, liver only metastases from breast cancer, small renal tumours particularly in a single kidney or a patient not suitable for surgery, due to co morbid conditions, primary and secondary lung tumours usually in association with radiotherapy. RF ablation is also used for nerve ablation to achieve pain relief when tumour infiltrates nerves. We have used it for ablating the roots of brachial plexus and sacral nerve roots with extremely good results. Lesions up to 3 cm undergo complete ablation and necrosis while the larger lesion requires multiple RFA treatment to prevent recurrence. For both, local and systemic control of the disease, RFA can be combined with other modalities like chemotherapy.

RF Ablation in liver

Liver metastasis: Patients with liver metastasis do not survive beyond one year, if left untreated. Such patients rarely die due to primary disease. The most common and immediate cause of death in these patients is liver failure due to extensive hepatic involvement. Reduction in the tumour load in liver prolongs the survival. Long-term survival can be achieved in such patients, if the metastatectomy is performed (90% at 1 year and 20 - 40% at 5 year). However, only 5 - 10% of patients are suitable for surgical resection due to the advanced age, extra-hepatic involvement and co morbid conditions.



R F Ablation in progress

Hepatocellular Carcinoma (HCC): RFA was primarily developed for treating hepatocellular carcinoma. HCC have poor response to chemotherapy and radiotherapy. Surgical resection has been considered the only potentially curative option but the majority of patients are not amenable to resection due to the large size, location near major intra-hepatic blood vessels, underlying cirrhosis or a multicentric disease. RFA is a safe and quick alternative to surgery with a curative potential. After RFA treatment, median survival is 44 months with 10% local recurrence, which is comparable to that found in surgical series. Early recurrences (within 2 years) are due to both local and new lesions while late recurrences (after 2 years) are due to new lesions. RFA may be repeated for residual or recurrent tumor.

RF Ablation of lung tumours

The prognosis for most people diagnosed with lung cancer is relatively poor, only 15% of patients are alive five years after diagnosis. RFA in lung cancer is considered for early stage disease in patients who are not candidates for surgery. It has a role when there is radiation failure and chest wall involvement. It also helps in relieving pain.

RF Ablation in Renal Cell Carcinoma (RCC)

The incidence of Renal Cell Carcinoma (RCC) continues to increase. Many cases are incidentally found at cross-sectional imaging examinations such as Ultrasonography (US) and Computed Tomography (CT). Moreover, the incidence of RCC appears to be increasing independently of the use of cross-sectional imaging. RF ablation of RCC is a very promising technique and is most successful in treating small (<3 cm) exophytic tumors, although tumors up to 5.0 cm can be completely ablated. Tumors with a central component in the renal sinus require more ablations but can be successfully treated with multiple visits for repeated ablations. Longer-term studies of RF ablation of RCC left in situ will provide additional guidance for the most appropriate selection of patients for this treatment. Ideal case for RFA in RCC is an exophytic tumour which is less than 3 cm in size and has a safe percutaneous route.

Summary

At Rajiv Gandhi Cancer Institute & Research Centre, we have pioneered the technique of Radiofrequency ablation (RFA) to destroy tumors and have a highly experienced team to do the procedure. We were the first to introduce this revolutionary technology nearly ten years ago and have so far treated more than 150 patients. It is a relatively new treatment modality in cancer

where thermal energy is used to destroy cancerous tissue. It is an attractive option for local tumor control in patients who are not surgical candidates or who have failed conventional therapies. It is a technique that causes tissue necrosis by a process of heating. RFA has been conventionally used to treat liver cancers. It is very successful in small primary liver cancers as well as metastatic liver cancers. Currently its role is extended in treating primary and secondary lung tumors, bone tumors, and small kidney tumors.

RFA is preferred over other techniques available for local control of tumours. With information available on the internet, RFA has a consumer driven demand and patients demand it! Driving force for RF ablation apart from patient awareness is its rewarding outcome, less morbidity as compared to surgery and advances in available technology. Its popularity can be gauged from the fact that RSNA 2012 had over 100 presentations on its diverse applications. It is also the main theme in the European Conference on Interventional Oncology (ECIO 2013) to be held in Budapest this month. Since image guidance is the key to a successful RF ablation radiologists need to play the principal role in its applications and should accept the challenge in an emerging opportunity to be associated with management of patients.

Dr. Arvind K. Chaturvedi
Director Radiology

MEDICATION ERRORS: ACHILLES HEEL OF HEALTH CARE



Medication errors in hospitals are common, expensive and sometimes harmful to patients. To reduce the frequency of these preventable events, Infection Control Team, RGCI & RC organized CME programs in the Institute on 16th and 28th May, 2013. Medication errors occur at any point in the medication administration process – during ordering, transcription, dispensing and administering medications. Adverse drug events can be prevented and detected if we know the cause, for e.g.:

- Missed dose
- Wrong technique
- Illegible order
- Duplicate therapy
- Drug-drug interaction
- Inadequate monitoring
- Compounding error
- Wrong patient

Ongoing quality improvement programs for monitoring and prevention of medication errors has therefore become a high priority worldwide. There is mounting evidence for systems that use information technology (IT), such as computerized physician order entry, automated dispensing cabinets, bedside bar-coded medication administration, electronic medication reconciliation and clinical decision support, have fewer complications, lower mortality rates and lower costs. RGCI & RC has taken a step forward to reduce errors and make this as paperless hospital .

Dr. Neelam Sachdeva
Sr. Consultant & Chief of Microbiology

IMPORTANCE OF NAT (NUCLEIC ACID TESTING)

“Blood is the essence of Life”, “Donate blood, save life”. We all have been hearing this since years and do understand the importance of blood. The major concern remains that blood should bring life, not infections. There are certain diseases which are liable to be transmitted by blood and blood components. These are known as Transfusion Transmissible Infections. These include HIV, Hepatitis B, Hepatitis C, Malaria and Syphilis. The infections causing particular concern are HIV and Hepatitis B and C. The donated units of blood are tested for these infections before being transfused to patients.

The major concern remains the window period, which is the time period when infection is there but cannot be detected by serological tests. This remains a major setback, as every unit of blood that is issued to the patients should be free from all these infections. The answer to this is NAT Testing (Nucleic Acid Testing). Nucleic Acid Amplification Technology, as applied to Donor Screening, detects the presence of Viral Nucleic Acid, DNA or RNA in donated samples. In this technology, a specific RNA/DNA segment of the virus is targeted and amplified in vitro. The amplification step enables the detection of low levels of virus in the sample by increasing the amount of specific target present to a level that is easily detectable. The presence of specific nucleic acid indicates the presence of the virus itself and that the donation is likely to be infectious.

NAT Assays can either be performed on individual donations (ID NAT) or in minipools (MP) to detect the nucleic acid of the infectious agent. Testing by NAT reduces the window period considerably and hence reduces the chances of transfusion of infectious blood components. As each unit is separated into three components, the burden of false negatives sits heavy on the conscience of every blood banker. The only answer is to give the safest possible blood which in today's scenario is a combination of serology and NAT testing. In a nutshell:

- NAT has become essential part of ethical Blood donor testing.
- Public outcry is increasing by the day. Everyone wants the best that is available without any compromise.

Most importantly one false negative donation entering in to the blood transfusion line is found to be infecting about 3 healthy lives. The answer is NAT Testing on every donated unit of blood

Dr. Vinita Verma
Head – Transfusion Medicine

Mr. D. S. Negi (C.E.O.)
Dr. A. K. Chaturvedi
Dr. D. C. Doval
Dr. Gauri Kapoor
Dr. Anurag Mehta
Dr. S. A. Rao
Dr. P. S. Choudhury
Dr. S. K. Rawal
Dr. Kapil Kumar
Dr. Sunil Kr. Gupta
Dr. B. K. Naithani
Dr. Rupinder Sekhon
Dr. (Col.) A. K. Bhargava
Dr. R. S. Jaggi
Dr. Vineet Talwar
Dr. Sandeep Mehta
Dr. Sheh Rawat
Dr. S. K. Sharma
Dr. Amitabh Sandilium
Dr. Shivendra Singh
Dr. Swarupa Mitra

To:

If undelivered please return to :
Rajiv Gandhi Cancer Institute & Research Centre
Sector-V, Rohini, Delhi-110085

Printed & Published by Mr. K. K. Mehta on behalf of Indraprastha Cancer Society & Research Centre and Printed at Raju Art Printers, 18-A, Old Gobind Pura Extn., Street No. 2, Parwana Road, Delhi-51, Tel. : 9871006333, Published from RGCI&RC, Sector-V, Rohini, Delhi-110085

Editor : Dr. A. K. DEWAN