

# DocConnect

Professional Writings by Medical Practitioners, Max Super Speciality Hospital, Saket

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## The Miracle of a Heart Transplant

- The first ever successful heart transplant done at Max Super Speciality Hospital, Saket



**Dr. Kewal Krishan, Dr. Viveka Kumar,  
Dr. Rajneesh Malhotra, Dr. KK Talwar**

*Department of Cardiac Sciences  
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A 42 years old gentleman with C/O EPIGASTRIC PAIN for the last 3 years, breathlessness for the last 2.5 years and orthopnea for the last 10 months (off & on) diabetic for the last 3 years. He was first evaluated a year back for acute heart failure. Due to frequent admissions over there he was advised by cardiologist to undergo for heart transplant. Patient was referred to Dr. Kewal Krishan, Program In-charge, Heart Transplant & Ventricular Assist Devices, in December 2014 when he was evaluated for being a candidate for heart transplant. All investigations including right heart cath and immunological tests were performed. His pulmonary vascular resistance and other parameters were in acceptable limits of transplant. He was put on waiting list for transplant. During this period of 6 months when he received a new heart, he was admitted thrice for acute heart failure. On July 31, 2015, we received a call for the donor (A+ve) from another hospital. Dr. Kewal along with other team members went over there to evaluate the donor. Meanwhile recipient was called immediately to get admitted to Max Hospital, Saket to make him ready for the surgery. After complete evaluation of donor it was decided to take the heart. The local police acted swiftly and created a green corridor, which allowed us to travel a distance of 20 kms in a mere 16 minutes. As soon as we reached to operation theatre recipient was put on cardiopulmonary bypass and recipient cardiectomy was done. New heart was sutured in bicaval technique and cross clamp was removed. Heart started beating in no time. Slowly CPB was weaned off and chest closed in layers. Patient was extubated

next morning. Over the course of next few days inotropes were weaned off and all lines were removed. His post operative course was remained uneventful. Dr. Kewal has done four years of advanced clinical fellowships at world's top hospitals including Mayo Clinic, Rochester MN, USA and Mount Sinai Medical Centre, New York, USA where he gained expertise in advanced therapies in end stage heart failure. He was trained by internationally renowned surgeons for Heart Transplant and Ventricular Assist Devices. He is one of handful surgeons in India who are formally trained in all aspects of transplantation. He was trained intensively in the entire spectrum of ventricular assist devices including bridge to transplant, short term and long term devices and destination therapy. He has many publications in international journals to his name in this field including innovative techniques in ventricular assist devices.



Max Hospital, Saket runs the largest heart failure program in North India. The hospital has also implanted 4 Left Ventricular Assist Devices (LVAD's) in the last 6 months. These are very high end devices, which help patients suffering from end-stage Congestive Heart Failure (CHF), live normal lives. The hospital also runs an E C M O

(Extra Corporeal Membrane Oxygenation) programme, which allows very sick patients to recover their heart and lung functions particularly those who are on ventilator and doctors say patient would die in next few hours. The Heart Failure Programme at Max Hospital, Saket is comprehensive and unique and very well-coordinated.

It's an organised effort by heart failure experts to provide quality care for patients suffering from acute and chronic heart failure.

## Surgeon's Opinion



**Dr. Prateek Arora, Dr. Sunil Choudhary, Dr. Raghav Mantri**  
Max Institute of Aesthetic & Reconstructive Surgery Team  
Max Super Speciality Hospital, Saket

When I first saw Prakash Nirgudkar in the emergency, he was weak, looked exhausted and had frostbite on his face but when I saw the condition of his hand and forearm...the first thoughts that came to my mind were not very positive. Necrotising Fascitis or flesh eating infection is what he had developed and there was a lot of gangrene and infection in the hand. But even more than the hand, I was worried about his life because this disease could prove to be fatal if not contained. But when I spoke to him and now got some feedback from his friends I knew that this man's desire to live was amazing and I was sure in my mind that I would go all the way to save him and his hand. What ensued thereafter are multiple surgeries and reconstructions. He proved to be tougher than the disease and although the disease did some damage and eat into his flesh...he didn't let it eat into his indomitable spirit. He lost a finger but rather than this proving to be a disability, it seems to us like a symbol of his fight, his courage and his spirit.





# Laparoscopic approach in cases of obstructed inguinal hernias



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## ABSTRACT

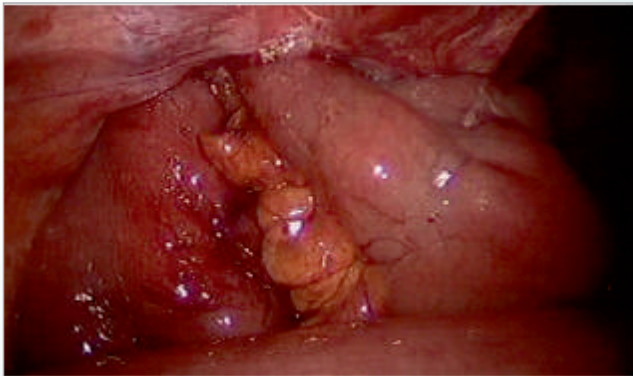
Acute Inguinal Hernias are a common presentation as surgical emergencies, which have been routinely managed with open surgery. In recent years, the laparoscopic approach has been frequently used for managing obstructed/strangulated inguinal hernias. Laparoscopic approach offers the advantages of less morbidity and early recovery as compared to open approach for the same. We describe the laparoscopic approach in a case of obstructed inguinal hernia based on a review of the literature with regards to its feasibility in laparoscopically managing the acute hernia presentation.

## CASE REPORT

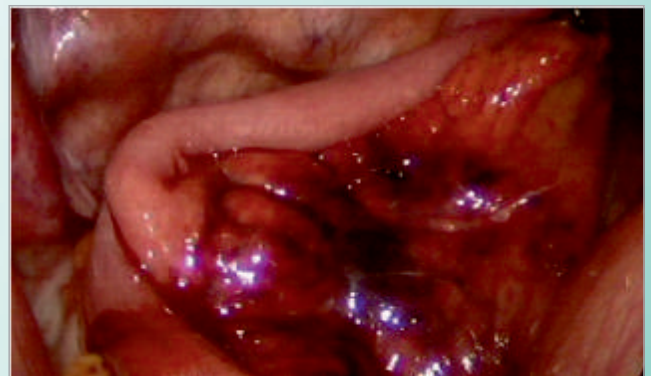
A 79-year-old female patient and a known Diabetic presented to emergency with complaints of pain abdomen, abdominal distention, vomiting along with non-passage of stools and faeces for 1 day. History and thorough clinical examination revealed distended abdomen with diffuse tenderness along with irreducible

inguinal swelling on left side. Blood investigations revealed raised TLC count. CECT abdomen revealed small bowel loops in inguinal canal with dilated small bowel s/o obstructed left inguinal hernia. After resuscitation and stabilization in emergency and explaining due risks patient was taken up for emergency diagnostic laparoscopy and proceed. On diagnostic laparoscopy there was a large defect in left inguinal region with small bowel loops going into the left inguinal canal and proximal dilated small bowel loops, also there was minimal free fluid in pelvis.

The small bowel loops were gently pulled back into the peritoneal cavity with care of not to injure the bowel. The small bowel loops and its mesentery was found to be congested with no definite evidence of strangulation.

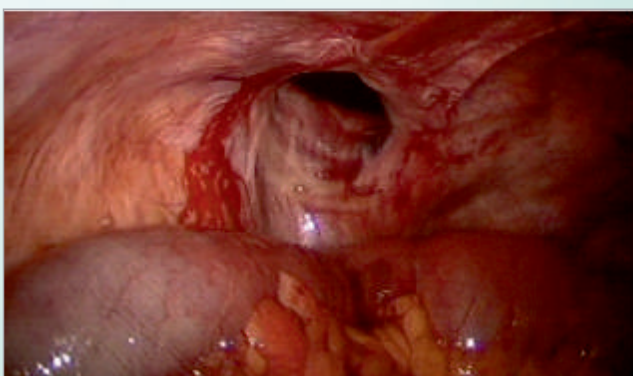


Small bowel loops entering into inguinal hernia defect

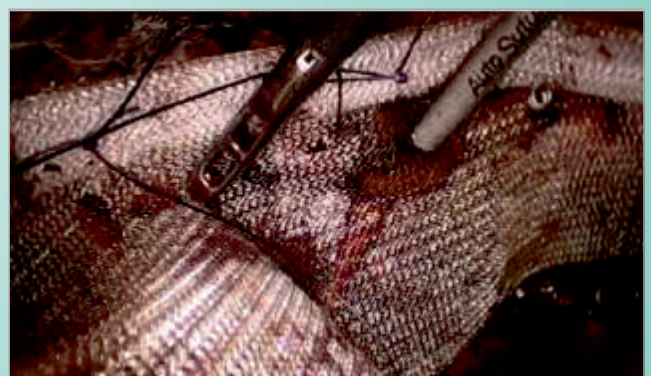


Congested mesentery of reduced small bowel loops

After successful reduction of bowel loops into the peritoneal cavity and confirming viable condition of bowel loops, left-sided inguinal hernia was repaired using total extra-peritoneal approach and mesh placement in extra-peritoneal space on left side.

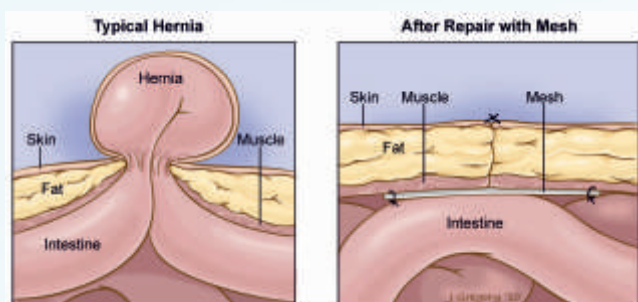


Large inguinal defect after successful reduction of bowel loops



Preperitoneal mesh placement

Diagnostic laparoscopy repeated again and viability of bowel reconfirmed. After surgery patient was shifted to ICU for stabilization and recovery in view of old age and co morbid conditions. Patient recovered well after the surgery and was discharged from hospital after 3 days. Patient is on follow up and is doing well.



## DISCUSSION

The laparoscopic approach for the elective repair of inguinal hernias has been well documented in the literature and widely accepted throughout surgical practice; however, the use of this approach for the management of incarcerated/ strangulated/ obstructed hernias has been a controversial issue with some surgeons being cautious in using this technique. This may be attributed to the technical difficulties encountered in reducing the hernia sac and contents and the increased risk for iatrogenic injuries.

The issue of manual reduction of the bowel while the patient is under anaesthesia is still controversial; however, using the laparoscopic approach solves this controversy for the bowel is examined in the peritoneal cavity without the need to manipulate outside through the internal ring as happens with the open technique. Instead, we can mobilize the bowel inside the abdomen and assess its viability. Total extraperitoneal approach for repair of hernia in such cases after diagnostic laparoscopy and reduction of

hernia offers the advantage of uncontaminated plane for mesh placement and lesser risk of mesh infection

## CONCLUSION

The laparoscopic approach, irrespective of whether TEP or TAPP, is feasible in tackling the problem, exposing the sac and its contents, reducing it, and eventually repairing the hernia with a mesh. It can also be used for bowel resection if the segment is deemed non-viable after the repair has been completed and gives ample time to the bowel to manifest as viable or non-viable to the surgeon. Laparoscopic approach for acute inguinal hernias is a better option than open surgery for the same as it gives the patient the benefit of less morbidity, less postoperative pain, faster recovery, small scars and early hospital discharge.

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# Max Institute of Medical Excellence (MIME) announces American Heart Association Courses

Max Institute of Medical Excellence (MIME), as an educational division of Max Healthcare Institute Ltd. which is a dedicated centre for medical education and training of medical/ non-medical professionals. MIME is proficient in conducting programs which are well crafted to make its trainees and students confident to use their skills with practiced ease, at the highest standard and in an environment that is safe for patients.

American Heart Association certified Cardiopulmonary Resuscitation (CPR) training programme are for professionals who are interested in learning and practicing critical skills and knowledge needed to respond to and manage a sudden cardiac arrest or choking emergency in the first few minutes until Emergency Medical Services (EMS) arrives.







## AMERICAN HEART ASSOCIATION COURSES

### Basic Life Support Course (Provider & Instructor)

It deals with initial assessment, identification and resuscitation of a patient in cardiac arrest. This is an 8hour workshop with AV demonstration and hands on practice on mannequins (e.g. Use of Bag Valve Mask, AED, CPR). Towards the end there is an assessment of every candidate on MCQ and skill stations. On successful demonstration of required skills the candidates are awarded a BLS card from AHA.

### Advanced Cardiac Life Support Course (Provider & Instructor)

It deals with continued resuscitation of a patient in cardiac arrest and entails use of advanced techniques like intubation, ventilation, medications. It is mandatory to have a BLS certification to be eligible to enroll for ACLS. It is a structured 2 day training programme which involves AV demos, skill stations, scenario based teaching. A must do for all the health care providers working in critical care, emergency areas. The workshop has pretest assessment, hands on training followed by post test MCQ and skills assessment. Enrollment for the course is done at least 2 weeks in advance in order to receive the course material for preparation. All levels of Healthcare providers with BLS certification (Preferably allopathic doctors, nurses, emergency medical technicians, paramedics) are eligible for the course.

### Advanced Cardiac Life Support Course for Experienced Providers (ACLS-EP)

ACLS EP course is designed to improve outcomes in complex cardiovascular, respiratory and other (eg, metabolic, toxicologic) emergencies by expanding on core ACLS guidelines and encouraging critical thinking and decision-making strategies. Through instruction and active participation in case-based scenarios, learners enhance their skills in the differential diagnosis and treatment of pre-arrest, arrest and post-arrest patients. The audience includes physicians, paramedics and emergency department or critical care nurses & other professionals who are deeply involved in the field of resuscitation, including scientists, educators and researchers may also take the ACLS EP Course.

### Pediatric Advanced Life Support Course (Provider & Instructor)

For pediatricians, emergency physicians, family physicians, physician assistants, nurses, nurse practitioners, paramedics, respiratory therapists, and other healthcare providers who initiate and direct advanced life support in pediatric emergencies. It is designed to aid the pediatric healthcare provider in developing the

knowledge and skills necessary to efficiently and effectively manage critically ill infants and children, resulting in improved outcomes.

## WORK PLACE COMMUNITY COURSES

### Heart Saver AED (Automated External Defibrillator)

These courses are ideal for anyone in the community interested in learning the skills and use of AED (Automated External Defibrillator) and relief of choking for victims of all age-groups.

### Heart Saver First Aid

Heart saver first aid courses have been designed to teach the skills of First Aid for victims of all age-groups. The course is video-based with instructor-led discussion and simulation. Students participate, practice and complete various skill development activities

### Heart Saver CPR & AED

This Personal Learning programme allows anyone to learn the core skills of CPR using their own personal kit. The kit contains everything needed to learn basic CPR, AED skills and choking relief anywhere, from the comfort of your home to a large group setting.

## AHA 2015 GUIDELINES ROLLOUT TO BE HELD ON 21ST NOV 2015 AT HYDERABAD INTERNATIONAL CONVENTION CENTER

### For AHA India Instructors/ RFs:

- AHA India instructors/ RFs are welcome.
- The AHA cross-functional team mentioned above is developing tools to help Instructors Bridge between 2010 materials and 2015 Guidelines science until new materials roll out.
- Instructors attending the 2015 Guidelines Update conference will learn how to use these tools.
- This conference offers optional enrichment workshops where Instructors can learn additional information about other aspects of training like new technology or resources. We may plan an enrichment course specific to international needs, like CPR verify.

# Prevalence of malnutrition in head and Neck cancer patients undergoing treatment (chemotherapy and radiotherapy) in Max Super Speciality Hospital, Saket



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## ABSTRACT

According to the global Burden of Cancer report published in journal JAMA Oncology India had more than 1.17 million new cancer cases and 675,000 deaths in 2013, up from 624,000 cancer cases and 426,000 deaths in 1990. India has the highest number of mouth cancer cases with new cases doubling between 1990 and 2013 to 84,700 from 34 34,000. The purpose of the study was to see the prevalence of malnutrition in Head & Neck Cancer undergoing treatment at Max Healthcare, Saket, between January to March 2015. Nutritional status of 40 head and neck cancer patients coming for therapy (Chemotherapy/ Radiation Therapy) were evaluated by anthropometric, biochemical parameters which included hemoglobin, albumin, sodium, potassium, calcium and magnesium. Diet recall method using questionnaire was used to assess the oral intake. The result shows a significant reduction in all the Biochemical parameters and also low oral intake in terms of Calories and proteins. SGA revealed that majority (87.5%) needed dietary intervention for better treatment response. Study concluded that Head and Neck Cancer patients need to be evaluated for their anthropometric, biochemical and nutritional parameters, and should be assessed at regular intervals by Nutritionist to prevent Malnutrition.

## INTRODUCTION

Head and neck cancer (HNC) (cancer of the oral cavity, oropharynx, hypopharynx and larynx) is the seventh most common malignancy in the world<sup>[1]</sup>. The majority of patients with HNC present with locally advanced disease<sup>[1]</sup>. Head and neck cancer patients are frequently malnourished at the time of diagnosis and prior to the beginning of treatment<sup>[2-3]</sup>. In addition, chemo-radiotherapy (CRT) causes or exacerbates symptoms, such as alteration or loss of taste, mucositis, xerostomia, fatigue, nausea and vomiting, with consequent worsening of malnutrition<sup>[4-5]</sup>. It is well known that radiotherapy is invariably associated with mucositis, xerostomia, dysphagia, hematological toxicities and other acute side effects, whose incidence increases when chemotherapy is also administered, and that oral mucositis incidence leads to higher unplanned breaks and delays in radiotherapy administration<sup>[6-7]</sup>.

Head and Neck Cancer in India are emerging as a major public health problem, which are lifestyle related, have a lengthy latent period. It has distinct demographic profile risk factors, food habits, family and personal history<sup>[8-9]</sup>. According to the global Burden of Cancer report published in leading medical journal JAMA Oncology India had more than 1.17 million new cancer cases and 675,000

deaths in 2013, up from 624,000 cancer cases and 426,000 deaths in 1990. India has the highest number of mouth cancer cases with new cases doubling between 1990 and 2013 to 84,700 from 34 34,000.

Patients with head and neck cancer face unique challenges in maintaining adequate nutrition. Both the disease and its treatments, especially surgery and radiation therapy, have significant negative impact on upper digestive tract function and their oral intake is often compromised during treatment<sup>[8-9]</sup>. Poor nutritional status can negatively affect cancer prognosis by decreasing response to therapy and increasing complications and toxicities to treatment.<sup>[10-11]</sup> Total weight loss reduction of 20% or more significantly correlates with treatment interruption, infection, hospital readmission, and early mortality.<sup>[12-13]</sup>

This review aimed to define the role of nutritional counseling, oral nutritional supplements, in the prevention and treatment of malnutrition in HNC patients undergoing CRT as well as their impact on CRT-related toxicity and survival.

## INCLUSION CRITERIA

Patients qualifying the following inclusion criteria will be included in the study

- >18 yrs of age, either Male or female
- Indian population
- Primary Head and Neck Cancer patients with chemotherapy or Radiotherapy coming in Max Cancer Centre, Saket, New Delhi

## EXCLUSION CRITERIA

- < 18 years of age
- Other type of cancer
- International patients
- Patients had not gone for any oncology surgery in past
- Patients who were not agree to participate in study

## METHOD

Data was collected of a total of 40 Head and Neck Cancer patients coming for therapy (Chemotherapy/ Radiotherapy). The study was conducted at Max Healthcare, Saket, New Delhi. The time period of the study was 3 months, January to March 2015. Nutritional status was evaluated by anthropometric measurements, biochemical parameters which included hemoglobin, albumin, sodium, potassium, calcium and magnesium. 24 hour diet recall method was

used to assess the oral intake. A questionnaire method was used to get detail history like, age, sex, height, weight, BMI and total weight loss, were recorded.

## RESULTS AND DISCUSSION

Of the 40 head and neck cancer patients screened, 82.5 % were male. Majorities (55%) of the subjects were in the age group of 60 years or above and only 5 % was in the age group of below 30 years and below.

All the subjects had undergoing with chemotherapy and radiotherapy, and belonged to both low income group and high income group. Most (90.8%) of the subjects were sedentary workers and only 9.2 % of them was found to be involved in moderate activity.

Urban population shows more prone to Head and Neck Cancers. Hypertension and diabetes were prevalent among 64.3% of the subjects. About 70% of the subjects had a habit of smoking and tobacco chewing. Alcohol consumption was comparatively less as compared to smoking/ chewing.

Majority of the subjects (68.4%) were non vegetarian. 70 % of the subjects had the habit of skipping breakfast and had irregular meal patterns

## ANTHROPOMETRIC MEASUREMENT

The percentage of anthropometric measurement of the test groups during their therapy and SGA assessment score are presented in Table 1 and 2

Table-1 BMI						
			BMI			Total
			<18.00	18.00-24.99	25.00+	
M/F	F	Count	0	5	2	7
		%within M/F	0.00%	71.40%	28.60%	100.00%
	M	Count	3	27	7	33
		%within M/F	9.10%	69.70%	21.20%	100.00%
Total		Count	3	28	9	40
		%within M/F	7.50%	70.00%	22.50%	100.00%

Body mass Index (BMI) is used to measure acute protein-energy malnutrition, useful measure of underweight, overweight and obesity. It is calculated from the height and weight. Results presented in Table 1 indicated that in terms of males 70% of the subjects had normal BMI, 22.5% were overweight, only 7.5 % were malnourished, and in terms of females 69.7% of the subjects had normal BMI, 21.2 % were overweight, only 9.1 % were malnourished.

Whereas, table 2. Indicates that 87.5 % of the patients require intervention by dietician and advise nutritional supplement as required therapeutically. Subjective Global Assessment (SGA) assesses nutritional status based on the features of a history (weight change, dietary intake change, gastrointestinal symptoms that have

persisted for greater than 2 weeks, and functional capacity) and physical examination (loss of subcutaneous fat, muscle wasting, edema and ascites, Features are combined subjectively into an overall or global assessment in which patients are rated as being well nourished, moderately malnourished, or severely malnourished.



Table- 2 SGA\_Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4-8	35	87.5	87.5	87.5
	>9	5	12.5	100.0	100.0
	Total	40	100.0	100.0	

## BIOCHEMICAL PARAMETERS

The study shows that there were significant electrolyte imbalances in head and neck cancer patients during their therapy. With regards to hemoglobin of the subjects was low in 95% and albumin was found to be low in 72.5% there was significant electrolyte imbalance among the subjects i.e Hyponatremia (55%), Hypokalemia ( 20 %), Hypomagnesimia (40%). Calcium levels were also low in 97% of the patients. Few of the patients 25% were Hyperkalemic.

Haemoglobin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 13.0	38	95.0	95.0	95.0
	13.0 - 16.9	2	5.0	5.0	100.0
	Total	40	100.0	100.0	

Albumin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 3.50	29	72.5	72.5	72.5
	3.50 - 5.00	11	27.5	27.5	100.0
	Total	40	100.0	100.0	



## ORAL INTAKE

24 hour diet recall method was used to assess the daily oral intake in terms of calories and proteins. Only 22.5% of the patients were meeting their calories requirement, 77.5% were taking less oral intake i.e less than 1500 kcal/ day, in which 25% were taking less than 1000 kcal/ day. Detailed history reveals that most of them were

Oral Intake (calories)					
			M/F		Total
			F	M	
Oral Intake (calories (Binned))	<1000.00	Count	2	8	10
		% within Oral Intake (calories (Binned))	20.0%	80.0%	100.0%
	1000.00 – 1499.00	Count	4	17	21
		% within Oral Intake (calories (Binned))	19.0%	81.0%	100.0%
	1500.00 – 1999.00	Count	1	8	9
		% within Oral Intake (calories (Binned))	11.1%	88.9%	100.0%
Count			7	33	40
% within Oral Intake (calories (Binned))			17.5%	82.5%	100.0%

Oral Intake (Protein)					
			M/F		Total
			F	M	
Intake Protein_Group	10-30	Count	0	2	2
		% within Intake Protein_Group	22.7%	77.3%	100.0%
	>51	Count	2	14	16
		% within Intake Protein_Group	12.5%	87.5%	100.0%
Total			7	33	40
% within Intake Protein_Group			17.5%	82.5%	100.0%

taking more of fruits, vegetables, juices and coconut water, as they thought that they all are very nutritious and good for cancer recovery, but the fact is that they all are low in calories and negligible proteins. Caloric and protein Intake were found to be very low. 57.5 % of the patients were not taking any protein supplement.

## CONCLUSION

Head and Neck Cancer Patients undergoing chemo-radiotherapy are at risk of malnutrition before and during treatment. Nutritional counseling and oral nutritional supplements are highly recommended to increase dietary intake and to prevent therapy-associated weight loss. They need to be frequently evaluated for their anthropometric, biochemical and nutritional parameters, and should be assessed at regular intervals by Nutritionist to prevent Malnutrition.

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# RADIOLOGY CASE OF THE MONTH

## CAM Type 1 Femoroacetabular Impingement with Fracture

Dr. Nafisa Shakir Batta, *Consultant - Radiologist, Max Healthcare*

### Case Presentation

23 year old male patient, complaints of pain on walking, bilateral painful limp, left more than right.

### Xray Pelvis With Both Hips

Bilateral aspherical femoral heads with femoro-acetabular uncovering and broad necks. The neck of left femur demonstrates interrupted trabecular pattern with a doubtful cortical overriding at medial margin suggesting a fracture

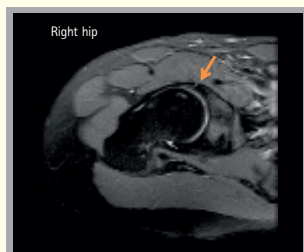


### MRI Pelvis Findings

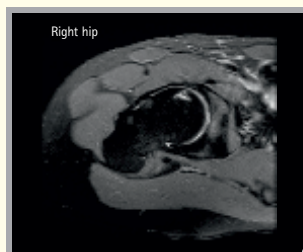
Coronal and axial oblique images exhibit typical piston-grip deformity of bilateral proximal femora, lack of femoral neck concavity, diminished femoral head-neck offset, aspherical femoral heads, acetabulo-femoral uncovering and bony bump with subchondral edema at anterosuperior neck. The lateral femoral tubercles are also prominent. These features are compatible with bilateral CAM type of femoroacetabular impingement (FAI type 1). Associated labral tears were evident as marked in the figures below.

### Imaging

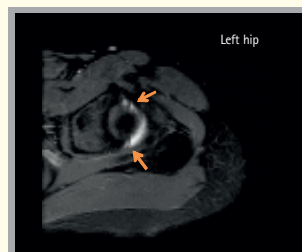
MRI Pelvis with axial oblique imaging of both hip joints was performed.



Linear hyperintensity at anterior labrum consistent with partial labral tear at right hip.



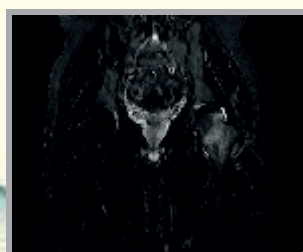
Osseous bump and prominent femoral tubercles with subchondral edema.



Large anterosuperior complete labral tear with intervening fluid cleft (10 - 2 o'clock position).



Edema at left femoral neck and hip joint effusion.



A chronic femoral neck fracture is seen with marrow edema and cortical overriding, minimal edema at iliopsoas muscle and small volume joint effusion.



# Max Institute of Musculoskeletal Sciences (MIMS)

Comprehensive Care for all your bone, joint and muscle problems.

## SERVICES

- Specialised treatment for Joint Disorders, Spinal Ailments and Sports Injuries • Hand, Foot & Ankle Surgery • Podiatry • Chiropractics • Rheumatology • Pain Management of Trauma & Fractures • Physiotherapy • Paediatric Orthopaedics

# MIMS WELCOMES



**Dr. Harsh Priyadarshi**

Sr. Consultant  
Orthopaedics & Spine Surgery  
Max Super Speciality Hospital, Saket  
Mon, Wed & Fri: 2.00 pm – 4.00 pm

## EDUCATION

- MBBS from MGIMS, Nagpur University
- MS (Orthopaedics) MGIMS, Nagpur University
- Fellowship Programme in Spine, Australia/ US/ UK/ Paris

## EXPERIENCE

- Senior Consultant Orthopaedic Spine Surgeon at Saket City Hospital, Delhi
- Consultant Orthopaedic Spine Surgeon at Max Super Speciality Hospital, Delhi
- Research Spine Fellow Spine Service at St. George Hospital, Sydney, Australia
- Consultant Orthopaedic Spine Surgeon at Max Hospital, Delhi



**Dr. V. Anand Naik**

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Orthopaedics & Spine Surgery  
Max Super Speciality Hospital, Saket  
Tues: 6.00 pm – 8.00 pm  
Thur & Fri: 2.00 pm – 4.00 pm

## EDUCATION

- MBBS from Maulana Azad Medical College, Delhi
- MS (Orthopaedics) from University College of Medical Sciences, Delhi
- Post Doctoral fellowship in Spine Surgery, Royal Australasian College of Surgeons, Australia

## EXPERIENCE

- Specialist Spine Surgeon, Gold Coast Spine, Australia
- Specialist Spine Surgeon, Allamanda Private Hospital, Australia
- Associate Consultant, Spine Surgery, SGH, Singapore
- Spine Fellow, SGH & NUH, Singapore
- Spine fellow, Korea University Scoliosis Research Center, Seoul, South Korea
- Sr. Registrar, UCMS & GTB Hospital, Delhi



**Dr. Vivek Dutt**

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Sat : 9.00 am – 11.00 am

## EDUCATION

- MBBS from Christian Medical College, Vellore, India, 1998-2004
- Diploma in Orthopaedics from Christian Medical College, Vellore, India, 2004-06
- Masters in Orthopaedic Surgery from Christian Medical College, Vellore, India, 2006-08
- Clinical Fellowship, Paediatric Orthopaedics, Gillette Children's Speciality Healthcare, University of Minnesota, Minneapolis, August 2014 – August 2015

## EXPERIENCE

- Associate Professor – Paediatric Orthopaedics, Christian Medical College, Vellore, Oct'13 – Jul'14
- Assistant Professor – Paediatric Orthopaedics, Christian Medical College, Vellore, Sept'08 – Oct'13
- Sr. Resident – Paediatric Orthopaedics, Christian Medical College, Vellore, Mar'08 – Sept'08

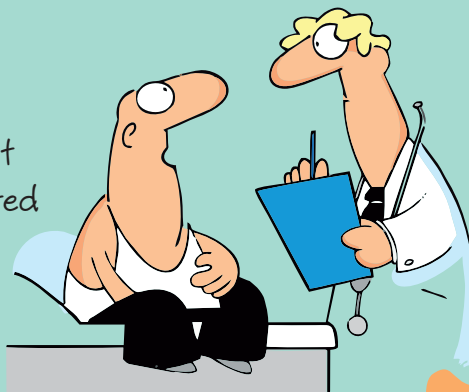


# Funny Bone



"What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?"

"I cry eat healthy. I never sprinkle salt one ice cream, I only eat decaffeinated pizza and my beer is 100% fat free."



"More and more patient are going to the Internet for medical advice. To keep my practice going, I changed my name to Dr. Google."

