Sri Lakshmi Narayana Institute of Medical Sciences

From
Dr K Balagurunathan,
Professor and Head,
General Surgery,
Sri Lakshmi Narayana Institute Of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

Date 3/6/2017

To
The Dean,
Sri Lakshmi Narayana Institute Of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

Sub: Permission to conduct value-added course: MANAGEMENT OF THORACIC TRAUMA

Dear Sir,

With reference to the subject mentioned above, the department proposes to conduct a value-added course titled: **MANAGEMENT OF THORACIC TRAUMA ,30 Hours course on JULY 2017- DEC 2017**. We solicit your kind permission for the same.

Kind Regards

PROFESSOR & HOD
[illegible]

DR K BALAGURUNATHAN

HOD, GENERAL SURGERY

FOR THE USE OF DEANS OFFICE

Names of Committee members for evaluating the course:

The Dean, DR G. JAYALAKSHMI

The HOD: DR K BALAGURUNATHAN

The Expert: DR ASAYAS BOSCO CHANDRA KUMAR

The committee has discussed about the course and is approved.

PROFESSOR & HOD

Dean

(Sign & Seal)

Subject Expert

(Sign & Seal)

HOD

(Sign & Seal)

OFFICE OF THE DEAN

Sri Lakshmi Narayana Institute of Medical Sciences

OSUDU, AGARAM VILLAGE, VILLIANUR COMMUNE, KUDAPAKKAM POST,
PUDUCHERRY - 605 502.
[Recognised by Medical Council of India, Ministry of Health letter No. U/12012/249/2005-ME (P -II) dt. 11/07/2011]
[Affiliated to Bharath University, Chennai - TN]

Circular

07.06.2017

Sub: Organising Value-added Course: MANAGEMENT OF THORACIC TRAUMA

With reference to the above mentioned subject, it is to bring to your notice that Sri Lakshmi Narayana Institute of Medical Sciences, **Bharath Institute of Higher Education and Research** is organizing a value added course **"MANAGEMENT OF THORACIC TRAUMA"**

The application must reach the institution along with all the necessary documents as mentioned. The hard copy of the application should be sent to the institution by registered/ speed post only so as to reach on or before 15th JULY 2017. Applications received after the mentioned date shall not be entertained under any circumstances.

Dean

Course Proposal

Course Title: **MANAGEMENT OF THORACIC TRAUMA**

Course Objective:

1. Introduction
2. Primary Survey
3. Breathing Maifestations
4. Tension Pneumothorax
5. Open Pneumothorax
6. Flial Chest
7. Haemthorax
8. Cardiac Tamponade
9. Secondary Suvery
10. Tracheobronchial Tree Injury
11. Traumatic Aotic Disruption
12. Traumatic Diaphragmatic Disruption
13. Subcutaneous Emphysema
14. Mediastinal Traversing Ijuries

Course Outcome:

Course Audience: MBBS UNDERGRADUATES

Course Coordinator: DR ASAYAS BOSCO CHANDRA KUMAR

Course Faculties with Qualification and Designation:

1. Dr Balagurunathan , Prof and HOD General Surgery
2. Dr Asayas Bosco Chandra Kumar, Prof General Surgery
3. Dr. Senthil Velan , Prof General Surgery

Course Curriculum/Topics with schedule (Min of 30 hours)

SINo	Date	Topic	Time	Hours	Faculty
1.	20/7/2017	1. Introduction	4-6PM	2	Dr K Balagurunatha
2.	23/7/2017	2. Primary Survey	4-7PM	3	Dr Asayas

3.	25/7/2017	3. Breathing Mailestations	4-6PM	3	Bosco Dr K Balagurunatha
4.	27/7/2017	4. Tension Pneumothorax	4-6PM	2	Dr Asayas
5.	29/7/2017	5. Open Pneumothorax	4-7PM	3	Bosco Dr K Balagurunatha
6.	2/8/2017	6. Flial Chest	4-7PM	3	Dr Asayas
7.	5/8/2017	7. Haemothorax	4-7PM	3	Bosco Dr. Senthil Velan
8.	6/8/2017	8. Cardiac Tamponade	4-6PM	2	Dr K Balagurunatha
9.	9/8/2017	9. Secondary Survery	4-6PM	2	Dr. Senthil Velan
10.	12/8/2017	10. Tracheobronchial Tree Injury	4-7PM	3	Dr Asayas Bosco
11.	14/8/2017	11. Traumatic Aotic Disruption	4-6PM	2	Dr. Senthil Velan
12	17/8/2017	12. Traumatic Diaphragmatic Disruption	4-6PM	2	Dr K Balagurunatha
			TOTAL HOURS	30	

REFERENCE BOOKS: (Minimum 2)

1. **Schwartz's Principles of Surgery, 11th Edition**
2. **Bailey And Love's Short Practice of Surgery 27th Ed**

VALUE ADDED COURSE

1. Name of the programme & Code

MANAGEMENT OF THORACIC TRAUMA GS07

2. Duration & Period

30 hrs & JULY 2017 – DEC 2017

3. Information Brochure and Course Content of Value Added Courses

Enclosed as Annexure- I

4. List of students enrolled

Enclosed as Annexure- II

5. Assessment procedures:

Multiple choice questions- *Enclosed as Annexure- III*

6. Certificate model

Enclosed as Annexure- IV

7. No. of times offered during the same year:

I TIME, JULY 2017 – DEC 2017

8. Year of discontinuation: 2017

9. Summary report of each program year-wise

Value Added Course- JULY 2017 DEC 2017

Sl. No	Course Code	Course Name	Resource Persons	Target Students	Strength & Year
1	GS07	MANAGEMENT OF THORACIC INJURIES	Dr ASAYAS BOSCO CHANDRA KUMAR	4 TH MBBS	20 (JULY 2017 – DEC 2017)

10. Course Feed Back

Enclosed as Annexure- V

Professor General Surgery
Sri Lakshmi Narayana Institute of Medical Sciences
Osudu, Kalapet(post), Puducherry-605 502

DR ASAYAS BOSCO CHANDRAKUMAR

(PROF GENERAL SURGERY)

PROFESSOR & HOD

CO-ORDINATOR

DR K BALAGURUNATHAN

(HOD GENERAL SURGERY)

MANAGEMENT OF THORACIC TRAUMA

PARTICIPANTS HAND BOOK

COURSE DETAILS

Particulars	Description
Course Title	MANAGEMENT OF THORACIC TRAUMA
Course Code	GS07
Objective	1. Introduction 2. Primary Survey 3. Breathing Maifestations 4. Tension Pneumothorax 5. Open Pneumothorax 6. Flial Chest 7. Haemthorax 8. Cardiac Tamponade 9. Secondary Survery 10. Tracheobrnchial Tree Injury 11. Traumatic Aotic Disruption 12. Traumatic Diaphragmatic Disruption 13. Subcutaneous Emphysema 14. Mediastinal Traversing Ijuries
Further learning opportunities	ATLS guidelines
Key Competencies	On successful completion of the course the students will have knowledge in managing thoracic trauma emergencies
Target Student	4 TH MBBS Students
Duration	30hrs JULY 2017 – DEC 2017
Theory Session	10hrs
Practical Session	20hrs

Assessment Procedure	Multiple choice questions

INTRODUCTION

Thoracic trauma is one of the causes of a great number of deaths. Deaths due to thoracic trauma mightoccur before the patients reach the hospital or in the emergency room. Majority of these deaths arepreventable by correct diagnosis at the right time and appropriate management. Only <10% of blunt injuriesand 15-30% of penetrating injuries require thoracotomy and the rest of the cases can be managed withsimple procedures.

Pathophysiology:

Thoracic injuries result in hypoxia, hypercarbia and acidosis. Hypovolemia, perfusion mismatch due to contusion, hematoma etc and changes in intrathoracicpressures like in tension or open pneumothorax lead to tissue hypoxia. Hypercarbia may result from changes in intrathoracic pressures and metabolic acidosis is the result of hypoperfusion to the tissues.

Initial assessment and management:

Initial assessment and management consist of primary survey, resuscitation of vital function s, secondary survey and definitve care. Care has to be given to the identification of hypoxia at an e arly stage so that earlyintervention can be done. Life thr eatening injuries due to chest injuries are treated with airway control andthe placement of chest tube.

Primary survey:

The conditions which are to be identified during primary survey include:

-Airway obstruction

-Tension pneumothorax

- Open pneumothorax

-Flail chest

-Massive hemothorax

-Cardiac tamponade

Airway with cervical spine protection:

-Listen to the air movements at nose, mouth and lung fields.

-Inspect the oropharynx for any obstruction

-Look for the intercostals and sup raclavicular muscle retractions.

- Look for laryngeal injury as they can result in acute airway obstruction and may lead to death.

- Carefully observe for injuries to the upper chest, posterior dislocation or frac ture dislocation of sternoclavicular joints.

- Signs and symptoms of airway obstruction include stridor, change in voice quality and evident trauma to th base of the neck with palpable defect.

Management include

-Establishment and management of a patent airway, possibly by endotracheal intubation.

-Clearing the airway of any objects.

- Closed reduction of the injury through extension of the shoulders and manual reduction of the fracture. Special attention has to be paid to the alignment of the cervical spine and it should immbolized till injury is ruled out.

Breathing and ventilation:

Expose the chest and neck to assess breathing.

Inspect and palpate for tracheal deviation.

Assess respiratory rate and look for shallow respirations.

Be vigilant for cyanosis which is a late sign of hypoxia in trauma.

The following conditions which affect breathing and ventilation are to be assessed at this stage.

a.Tension pneumothorax:

A tension pneumothorax develops when there is a 'oneway valve' airleak from the chest wall or thelung.

Air enters the thoracic cavity, results in co mplete collapse of the lung, mediastinum is displaceed to the other side which results in a decreased venous return and compression of the opposite lung.

Most common cause of tension pneumothorax are

-Mechanical ventilation of a patient with visceral pleural injury.

-When a parenchymal injury fails to seal in simple pneumothorax.

-Occlusive dressing of a traumatic chest wall defect or

- When there is a markedly displaced thoracic spine fracture.

Signs and symptoms of tensio n pneumothorax include chest pain, air hunger, respiratorydistress, tachycardia, hypotension, trach al deviation, unilateral absence of breath sounds ,neck vein distension and cyanosis. Differentiation from cardiac

tamponade is done by the identification of hyper resonant percussion notes and absent breath sounds on the affected side.

Management : Immediate decompression via needle thoracocentesis (done by the insertion of a large caliber needle into second intercostal space in midclavicular line)

Definitive treatment → insertion of a chest tube into the fifth intercostal space just anterior to the midaxillary line.

Open pneumothorax (sucking chest wound):

These are large defects in the chest wall which are open.

If the opening is two third the size of trachea, air may pass from the wound with each respiratory effort which leads to impaired ventilation and hypoxia and hypercarbia.

Management includes:

Primary closure of the defect with occlusive dressing which is covered on three sides . Covering on three sides results in a flutter valve effect which aid in the movement of air during expiration.

Placement of a chest tube remoc to the wound.

Surgical closure of the wound is often required.

Flail chest:

A flail chest occurs when a se gment of the chest wall does not have bony continuity. It results incases of multiple rib fractures.

If there is injury to underlying chest wall or restricted chest wall movement due to pain, hypoxia may result.

There is paradoxical chest movement and most of the times flail chest may not be apparent due to splinting of the chest wall.

Diagnosis ; a chest X ray which may indicate several rib fractures and ABG analysis suggesting hypoxia.

Management includes:

Adequate ventilation

Adequate oxygenation with humidified oxygen

Fluid resuscitation

Analgesia to improve ventilation

Definitive management with re-e xpansion of lung.

Massive hemothorax:

Occurs when there is an accumulation of large amount of blood (>1500ml or 1/3rd or more ofpatient's blood volume) in the chest cavity. Presentation may be as hypotension or shock. M ost common cause of hemothorax is penetrating ch est injury. The patient may present with shock, absent breath sounds and dullness to percussion.

Management includes: Restoration of blood volume and decompression of chest cavity. Cryst alloids and blood products are to be used.

Insertion of a chest tube (38 French).

Auto transfusion of the blood ma y be done.

Early thoracotomy may be warranted in cases of massive hemothorax. Thoracotomy may also be required if there is a continuous blood loss of 200ml/hour for 2 to 4 hours.

Cardiac tamponade:

Most commonly seen in penetrating injuries but may also occur in blunt injuries. He mopericardium may result in decreased venous return and cardiac output. Removal of a small a mount of blood via pericardiocentesis may result in immediate improvement of the patient's condition.

Clinically, diagnosis is done by identification of Beck's triad (elevation of venous pressure, decreased arterial pressure and muffled heart tones). Pulsus p radoxus and Kussmaul's sign may or may not b e present.Pulseless electric activity (PEA) in the a bsence of tension pneumothorax and hypovolemi a suggests cardiac tamponade. Diagnostic measures include Focused assessment sonography in trauma (FAST) and echocardiogram.

Management includes:

Subxiphoid pericardiocentesis

Definitive management is thoracotomy and pericardiotomy with evacuation of blo od andrepair of the injured heart and associated stru ctures.

Subxiphoid pericardial window o r emergency thoracotomy and pericardiotomy may be performed in the ER.

Resuscitative thoracotomy may be done in patients who reach the ER puulseless, but have myocardial electrical activity.

Removal of blood, repair of the injuries and open cardiac massage may be done. Cross clamping of the descending aorta slows blood loss and ensures adequate supply to brain and heart.

Secondary Survey:

The conditions to be identified during secondary survey are

Simple pneumothorax.

Hemothorax.

Pulmonary contusion.

Tracheobronchial disruption.

Blunt cardiac injury.

Traumatic aortic disruption.

Traumatic diaphragmatic injury.

Meditational traversing wounds.

Simple pneumothorax: It results from air entering the potential space between the visceral and parietal pleura. It may be caused by penetrating or blunt trauma, lung laceration, and thoracic spine fractures. Signs and symptoms include decreased breath sounds and hyper resonance on percussion.

Management includes: Chest tube insertion Special attention has to be paid that general anesthesia or positive pressure ventilationshould never be administered in a patient who sustains traumatic pneumothorax who is atrisk for unexpected intraoperative pneumothorax until a chest tube is inserted.

Hemothorax: A hemothorax is caused by lung laceration or laceration of an intercostal vessel orinternal mammary artery resulting from either penetrating or blunt chest injury. Thoracic spine fractures also may result in hemothorax. **Management** include: Chest tube insertion. Operative intervention should be considered if significant blood loss is present(>1500ml or 200ml/hour for 2to4 hours).

Pulmonary contusion: This is the most common lethal chest injury. Careful observation of the patients withsuspected pulmonary contusion should be done as the respiratory failure in these cases maydevelop only slowly.

Management: If there is significant hypoxia (PaO2</ -65mmHg or SaO2 <=90% on room air), intubation and ventilation should be done during the first hour after injury. Monitoring with pulse oximetry, ABG, ECG should be done.

Tracheobronchial tree injury: Injury to the trachea or main bronchus and might be commonly overlooked during theprimary survey. Most of the injuries occur within an inch of the carina and there is a highmortality rate before and after reaching the ER associated with these injuries. Signs andsymptoms include hemoptysis, subcutaneous emphysema or tension pneumothorax with a mediastinal shift. If there is persistent air leak after chest tube insertion in pneumothorax, there should be suspicion of tracheobronchial tree injury. Confirmation of clinical diagnosisis done with bronchoscopy. Bronchial intubation of the opposite bronchus may be necessaryto ensure oxygenation. Immediate surgical intervention might be necessary in cases whereintubation is difficult due to paratracheal hematoma, associated oropharyngeal injuries or tracheobronchial injury itself.

Blunt cardiac injury: Blunt cardiac injury often results in myocardial contusion, cardiac rupture or valvular disruption. Patients with cardiac chamber rupture present with cardiac tamponade and should be diagnosed during primary survey. If there is atrial rupture, cardiac tamponade will develop only slowly. Patients often complain of chest discomfort and may have hypotensionand diagnosis is confirmed by ECG. Patients with myocardial contusion need continuousmonitoring for the first 24 hours, because of increased risk of sudden dysrythmias.

Traumatic aortic disruption: This is the most common cause of sudden death after a traumatic injury due to fall or roadtraffic injuries. Early management can result in survival of the patients if early identificationof the injury is done. In patients who reach the ER, there is evidence of a contained mediastinal hematoma which is life saving. Usually there are no typical signs and symptoms.There should be suspicion of aortic rupture in patients with a history of decelerating force.History should be correlated with radiological findings. Arteriography and CECT of chest are also helpful. The radiologic signs which may be present in vascular injury to the chest includes: - Widened mediastinum -Obliteration of aortic knob -Deviation of trachea to the right -Obliteration of space between pulmonary artery and aorta -Depression of left main stem bronchus 51

-Deviation of esophagus to right -Presence of pleural or apical cap -Left hemothorax -Fractures of first or second rib or scapula Management include: primary repair of aorta or resection of the injured area and grafting.

Traumatic diaphragmatic injury: This injury is most commonly diagnosed on the left side, as the liver protects it on the right side of the diaphragm. In blunt trauma, large tears lead to herniation and in penetrating trauma there aresmall perforations which lead to herniations, which might even take years to manifest. There arechances of missing these injuries as they are often misinterpreted as elevated diaphragm, acute gastric dilatation, loculated pneumohemothorax or sub pulmonary hematoma. Suspicion isconfirmed by the presence of gastric tube on chest X ray and also presence of peritoneal lavage fluidin chest drainage tube. VATS, laparocoscopy and MRI might be helpful in diagnosis. Management is surgical repair of the injury.

Mediastinal traversing wounds: These injuries are caused by penetrating objects which traverse the mediastinum and injures the heart, great vessels, tracheobronchial tree or esophagus. Diagnosis is made by the identification of an entrance wound in one hemithorax and the exit wound in the other. There are chances that a missile is lodged in the other hemithorax.Management includes: -Bilateral chest tube insertion -Monitoring of blood loss -Indications for thoracotomy are same as those of massive hemothorax.

OTHER MANIFESTATIONS OF CHEST INJURIES: Subcutaneous emphysema. Crushing injury to the chest (traumatic asphyxia). Rib, sternum and scapular #. Blunt esophageal rupture.

Subcutaneous emphysema: Often results from airway and lung injury. Most of the time, do not require treatment. Crushing injury to the chest: These injuries may lead to compromise in ventilator function and result in hypoxia and hypercarbia. This may sometimes produce traumatic asphyxia which is sudden extreme increase in venous pressure in superior venacava along with hypoxia. Associated injuries should be treated. Rib, sternum and scapular #. Most common sign indicating a fracture is pain on movement resulting in splinting of the thorax and thereby impairing ventilation, oxygenation and cough. Eventually this may result in atelectasis and pneumonia.

Fracture of the scapula, first or second ribs or sternum suggests increased level of injury and careful attention has to be given for assessment ofhead, neck, spinal cord, lungs and great vessels.

Fracture of lower ribs should increase suspicion for hepatosplenic injury.

Immediate reduction of sternoclavicular fracture is indicated as dislocation might cause superior venacaval obstruction.

Operative interventions in sternal or scapular fractures are sometimes required as they may cause blunt cardiac injury.

Adequate analgesia is imperative to ensure adequateventilation and intercostal block, epidural analgesia and systemic analgesics may be used. Blunt esophageal rupture:

Most esophageal ruptures are caused by penetrating trauma, blunt esophageal trauma is rare.

Blunt esophageal trauma can be caused by forceful expulsion of the gastric contents into the esophagus due to a powerful blow to the upper abdomen. A linear tear might beformed on the lower part of the esophagus which results in leakage of the contents into the mediastinum.

Esophageal rupture might also result from the insertion of NG tube, endoscope or dilators also.

Diagnosis is done by contrast studies and esophagoscopy.

Management includes wide drainage of pleural space and definitive surgical repair of the injury via thoracotomy.

Thoracic injury is common in multiply injured patient and can be associated with life threatening problems. • The conditions may be temporarily relieved by simple measures such as intubation, ventilation, tube thoracostomy, fluid resuscitation & needle pericardiocentesis. The ability to recognize these injuries & the skill to perform the necessary procedures can be life saving. For

VALUE ADDED COURSE

MANAGEMENT OF THORACIC TRAUMA GS07

List of Students Enrolled JULY 2017- DEC 2017

Sl. No	MBBS Student Name of the Student	Roll No	Signature
1	KISHORE K	U15MB310	
2	KRISHNA KUMAR M	U15MB311	
3	LAKSHMI N	U15MB312	
4	LEJO SALVIN G	U15MB313	
5	LINDA EVANS M	U15MB314	
6	MADHAVA SUBRAMANIAN	U15MB315	
7	MAHALAKSHMI M N	U15MB316	
8	MAHESHWARI C	U15MB317	
9	MAIKERTHI A	U15MB318	
10	MALAINESAN E	U15MB319	
11	MANIKANDAN T	U15MB320	
12	MANIKANDAN S	U15MB321	
13	MANOYESHWANTDEV M	U15MB322	
14	MOHAN R	U15MB323	
15	MOHD MOHSIN SAKEEN UR RAHMAN	U15MB324	
16	NAFEELA SHAHEEN M	U15MB325	
17	NAGALAKSHMI P	U15MB326	
18	NAGARJUN D	U15MB327	
19	NANDINI R	U15MB328	
20	NARENDIRAN N	U15MB329	

Kishore · K
USHB 310

SRI LAKSHMI NARAYANA INSTITUE OF HIGHER EDUCATON AND RESEARCH

Annexure - IV

MANAGEMENT OF THORACIC TRAUMA

MULTIPLE CHOICE QUESTIONS

Course Code: GS07

I. ANSWER ALL THE QUESTIONS

1 pneumothorax develops when there is a 'oneway valve' airleak from the chest wall or the lung is known as :

a. tension pneumothorax

b. open pneumothorax

c. both a and b

d. none

2. when a segment of the chest wall does not have bony continuity, due t multiple rib fractures. it is known as

a. flail chest

b. stove in chest

c. Both A & B are Correct

d. None of the above

3 Beck's triad

a. elevation of venous pressure

b. decreased arterial pressure

c. muffled heart tones

d. all the above

4 Beck's triad seen in

a. cardiac tamponade

b. tension pnuemothorax

c. Both A & B are Correct

d None of the above

5. management of tension pneumothorax

a. thoracocentesis

b. icd insertion

c. Both A & B are Correct

d None of the above

6 management of cardiac tamponade

a. thoracocentesis

b. pericariocentesis

c. Both A & B are Correct

d. None of the above

7. subcutaneous emphysema can occur in

a. rib fracure

b. sternu fracture

c. scapular fracture

d. All the above are correct

ASSESSOR NAME : M. BENTHILVELAN . M

SIGNATURE :

DATE : 18/8/2017

Dr. M. SENTHILVELAN, MS.,
Reg No. 63715
Professor
Sri Lakshmi Narayana Institute of Higher Education & Research

MAHALAKSHMI M N
U1SMB21 6

SRI LAKSHMI NARAYANA INSTITUE OF HIGHER EDUCATON AND RESEARCH

Annexure - IV

MANAGEMENT OF THORACIC TRAUMA

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b. sternu fracture

c. scapular fracture

d. All the above are correct

7/7

ASSESSOR NAME :

SIGNATURE :

DATE : 18/8/2017

Dr. M. SENTHILVELAN, MS.,
Reg. No. 51175
Professor, General Surgery
Sri Lakshmi Narayana Institute of Medical Sciences,
Oduvankuppam, Puducherry-605502

Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research

CERTIFICATE OF MERIT

This is to certify that KRISHNA KUMARI M has actively participated in the Value Added Course on MANAGEMENT OF THORACIC TRAUMA held during July 2017 – Dec 2017 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry- 605 502. India.

Professor & Head of Surgery
Sri Lakshmi Narayana Institute of Medical Sciences
Osudu, Kodapakkam, Puducherry-605 502

Dr. Asayas Bosco
Chandre Kumar
RESOURCE PERSON

PROFESSOR & HOD
DEPARTMENT OF GENERAL SURGERY
PONDICHERRY - 605 502
Dr. K BALAGURUNATHAN
COORDINATOR

Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research

CERTIFICATE OF MERIT

This is to certify that MANIKANDAN S has actively participated in the Value Added Course on MANAGEMENT OF THORACIC TRAUMA held during July 2017 – Dec 2017 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry-605 502, India.

Professor General Surgery
Sri Lakshmi Narayana Institute of Medical Sciences
Osudu, Kudapakkam, Puducherry-605 502

Dr. Asayas Bosco
Chandra Kumar

RESOURCE PERSON

PROFESSOR & HOD
DEPARTMENT OF GENERAL SURGERY

Dr. K BALAGURUNATHAN

COORDINATOR

Student Feedback Form

Course Name: **MANAGEMENT OF THORACIC TRAUMA**

Subject Code: **GS02**

Name of Student: C.MAHESWARI Roll No.: U15MB314

We are constantly looking to improve our classes and deliver the best training to you. Your evaluations, comments and suggestions will help us to improve our performance

Sl NO	Particulars	1	2	3	4	5
1	Objective of the course is clear				✓	
2	Course contents met with your expectations					✓
3	Lecturer sequence was well planned					✓
4	Lectures were clear and easy to understand					✓
5	Teaching aids were effective				✓	
6	Instructors encourage interaction and were helpful					✓
7	The level of the course					✓
8	Overall rating of the course	1	2	3	4	5 ✓

** Rating: 5 – Outstanding; 4 - Excellent; 3 – Good; 2– Satisfactory; 1 - Not-Satisfactory*

Suggestions if any:

Date: 17/8/2017

Signature

Student Feedback Form

Course Name: **MANAGEMENT OF THORACIC TRAUMA**

Subject Code: **GS07**

Name of Student: NAGALAKSHMI .P Roll No.: 11KMB326

We are constantly looking to improve our classes and deliver the best training to you. Your evaluations, comments and suggestions will help us to improve our performance

Sl. NO	Particulars	1	2	3	4	5
1	Objective of the course is clear				✓	
2	Course contents met with your expectations					✓
3	Lecturer sequence was well planned					✓
4	Lectures were clear and easy to understand					✓
5	Teaching aids were effective					✓
6	Instructors encourage interaction and were helpful					✓
7	The level of the course				✓	
8	Overall rating of the course	1	2	3	4	5 ✓

** Rating: 5 – Outstanding; 4 - Excellent; 3 – Good; 2– Satisfactory; 1 - Not-Satisfactory*

Suggestions if any:

Date: 17/8/2017

Signature

Date 11/12/2017

From
Dr K Balagurunathan.
Professor and Head.
General Surgery,
Sri Lakshmi Narayana Institute Of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

Through Proper Channel

To
The Dean,
Sri Lakshmi Narayana Institute Of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

Sub: Completion of value-added course: MANAGEMENT OF THORACIC TRAUMA

Dear Sir,

With reference to the subject mentioned above, the department has conducted the value-added course titled: **MANAGEMENT OF THORACIC TRAUMA** for 20students on JULY 2017- DEC 2017. We solicit your kind action to send certificates for the participants, that is attached with this letter. Also, I am attaching the photographs captured during the conduct of the course.

Kind Regards

PROFESSOR & HOD

Dr. BALAGURUNATHAN

HOD General Surgery

Encl: **Certificates**

Photographs