Introduction to Gambhir Thoracostomy Forceps

Col. Dr. G.L. Rajbhandary
Consultant Cardio-Thoracic Surgeon
Shree Birendra Hospital

Thoracostomy Tube Drainage Procedure is a life saving surgical procedure which has wide ranging application for the relief of acute respiratory distress patients following many surgical & medical diseases. This is a surgical procedure which should be available at all level of medical facilities, at all the time all the medical officers should be efficient to perform the surgery. This article has reference to the article published in previous volume of MJSBH. Vol III “Thoracostomy Tube Drainage process a life saving surgical procedure” by the author.

Gambhir Thoracostomy Tube Forceps

This is a modified large curved artery forceps to make insertion of chest tube drainage easier, quicker and safer in the thoracostomy tube drainage surgical procedure by dissection technique.

This is a large curved artery forceps which has concave grooves at it’s fore blades with serration in it’s inside fore blades, modified to accommodate the chest tube while inserting inside the pleural cavity.

There is a gap between the fore blades to accommodate chest tube, even when tips of the fore blades are closed.

This forceps can firmly hold chest tubes with it’s fore blades with its tips (beak) closed during insertion of chest tube.

This forceps makes easier, quicker and safer insertion (introduction) of chest tube during thoracostomy tube drainage procedure. This forceps reduces usual three 3 steps surgical procedure to single step surgical procedure.

The same Thoracostomy tube forceps will enter the pleural space and carry along with it chest tube into pleural space and will place the chest tube in pleural space in single surgical step.

In usual surgical procedure with large curved artery forceps having 3 steps.
1st step entering the pleural space.
2nd step enlarging the pleural hole and removing the forceps
3rd step introducing the forceps with chest tube, with artery forceps with it’s wide open tips.

With this usual procedure it takes
1. more time
2. more painful for patients
3. difficult procedure for surgeon

During the reinsertion of forceps along with chest tube it is usually difficult to find the old pleural hole due to bleeding and discharge of fluid in the surgical field in acutely respiratory distressed patient with curved artery forceps with it’s wide open tips.

Thoracostomy tube drainage procedure with this new Gambhir Thoracostomy tube forceps makes the thoracostomy chest tube drainage surgical procedure–
1. Very convenient for surgeon
2. Time saving by reducing 3 steps to a single step
3. Less Traumatic and less painful to patient
4. Safer surgical procedure

With this Gambhir thoracostomy tube forceps chest tube can be inserted in pleural cavity with chest tube firmly hold up with its tips closed (Beak closed) in single step (instead of 3 steps)

With introduction of this simple modified Gambhir Thoracostomy tube forceps medical professionals of all levels and at all levels of medical set up will be able to perform emergency thoracostomy tube drainage procedure safely in less time, in easy way with less pain to the patient for relief of acute respiratory distress.
Gambhir Thoracostomy Forceps

I am pleased to announce the manufacture and availability of Gambhir Thoracostomy forceps. An instrument company of India, Surgicoin in manufacturing the instrument and has agreed to market the instrument for medical use.

Acknowledgment:

I wish to thank Lt. Col. Shyam Krishna Shrestha and Mechanical Supervisor Biswo Lal Shrestha from Swoyambhu Barudkhana Workshop for helping me to design and develop the model instrument. Also I wish to thank Mr. Naresh Grover, Surgicoin, India and Mr. Bijaya Krishan Shrestha, Director & Mr. Sunil Bajracharya from Capital Enterprises for Coordinating in manufacture of the instrument.

Reference

5. Zimmerman MD, Bailie N.
7. Miller KS, Sahn FA,
10. Collop An, Kims, Sahn SA.
    Analysis of tube thoracostomy performed by pulmonologist at a Teaching Hospital Chest 1997, 112 : 710-713.
11. Rajbhandary GL :