Foreign Body Bronchus- Few experiences at TUTH.

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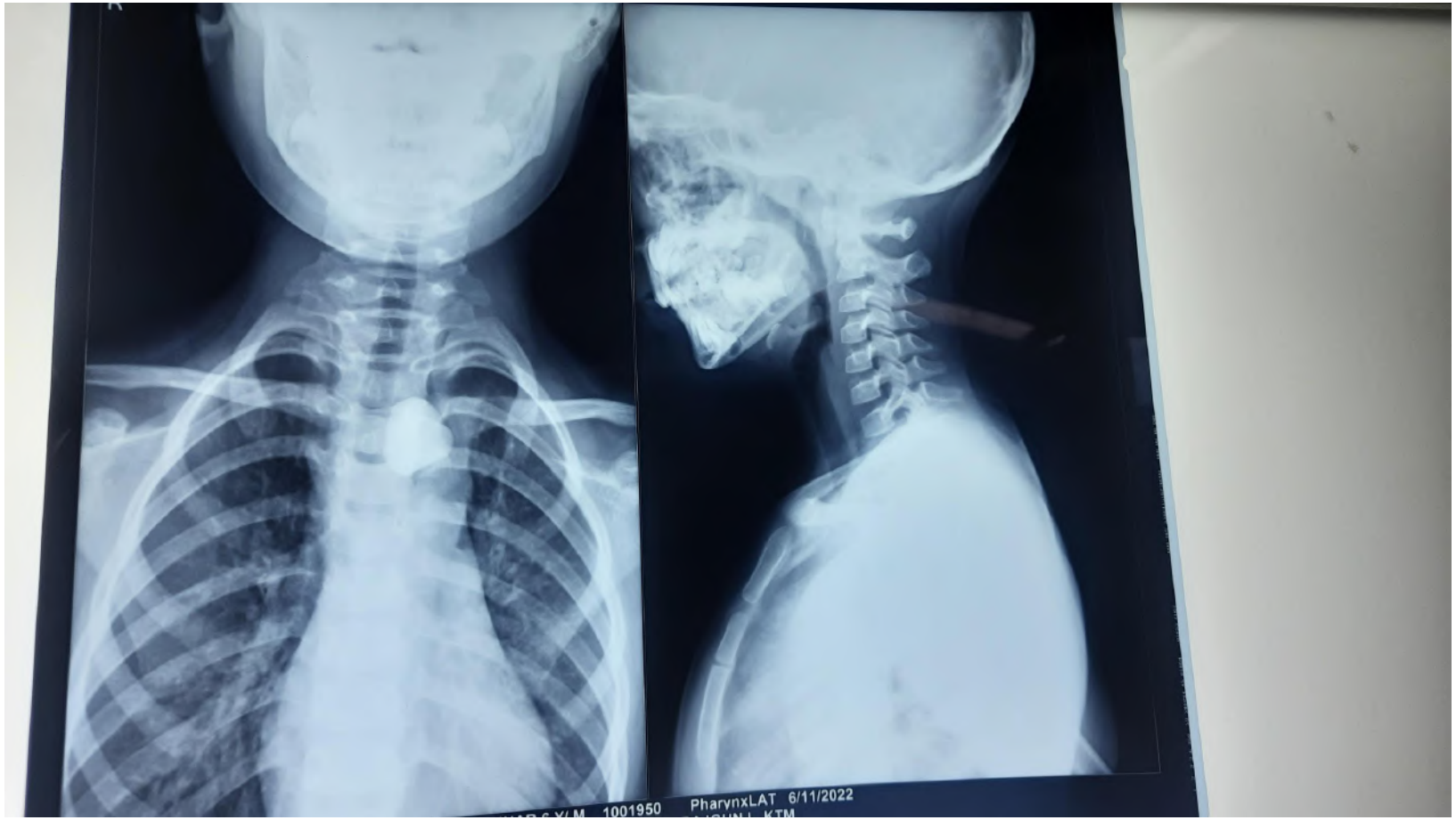
General Secretary

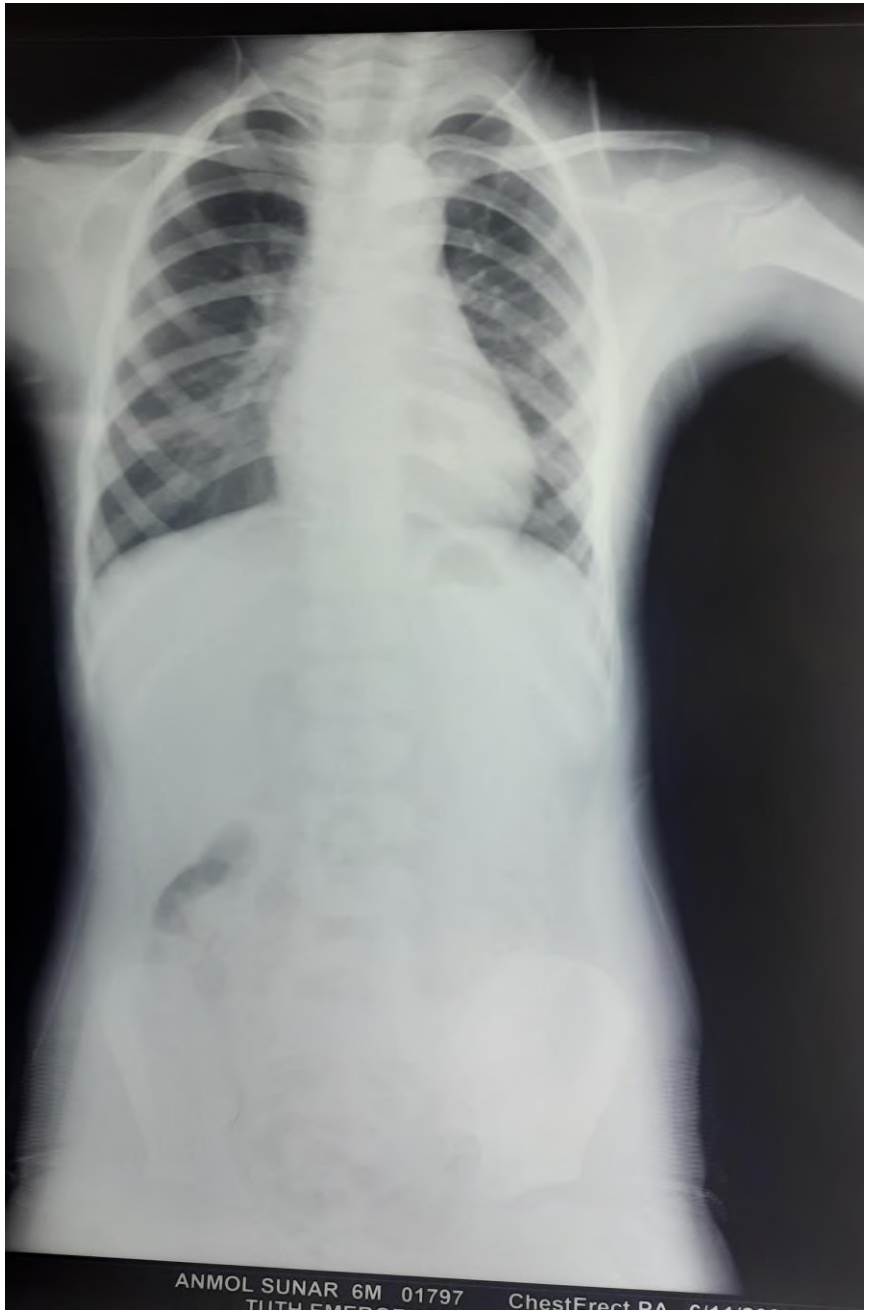
Society of Anesthesiologists of Nepal (SAN)

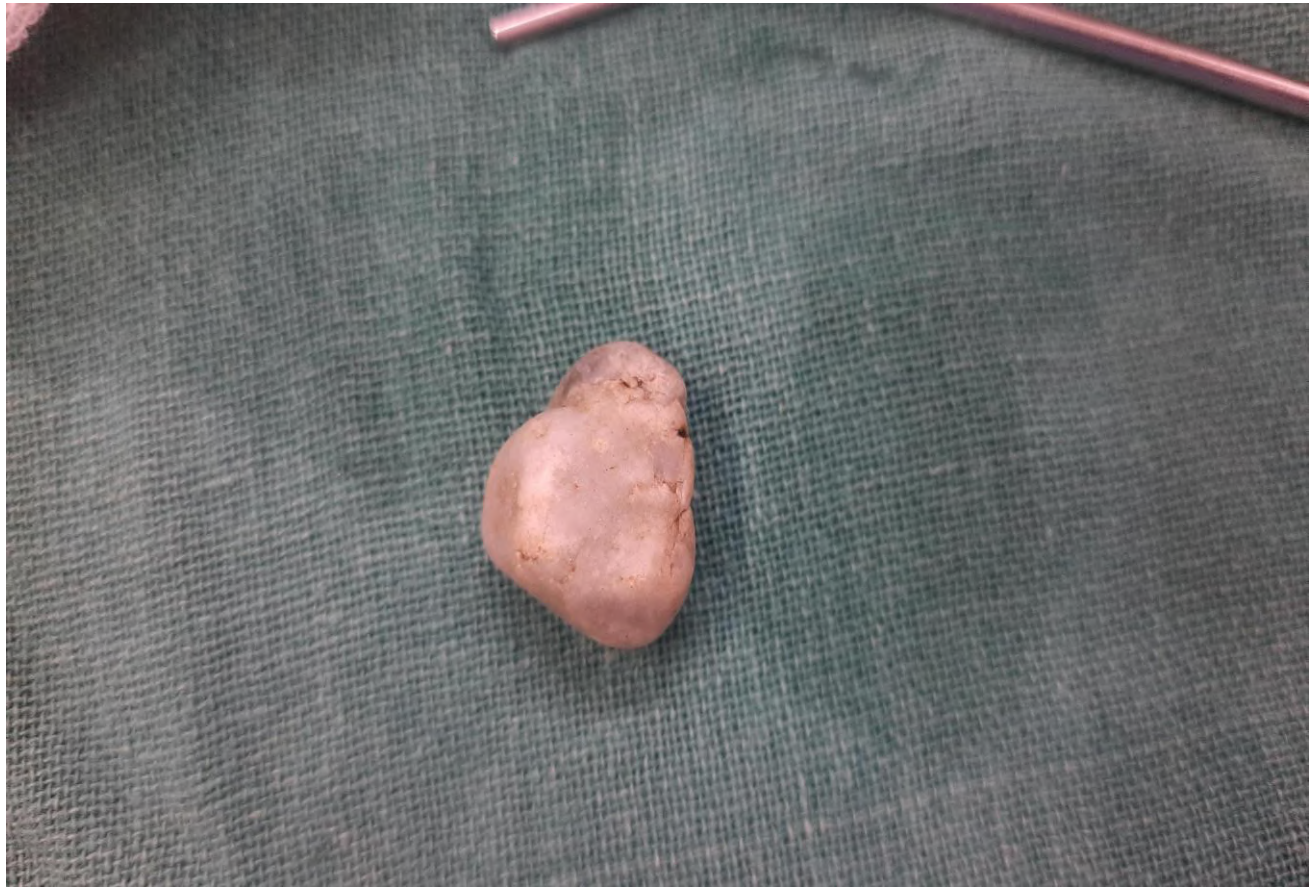
Conflict of Interest: None

Tribhuvan University Teaching Hospital

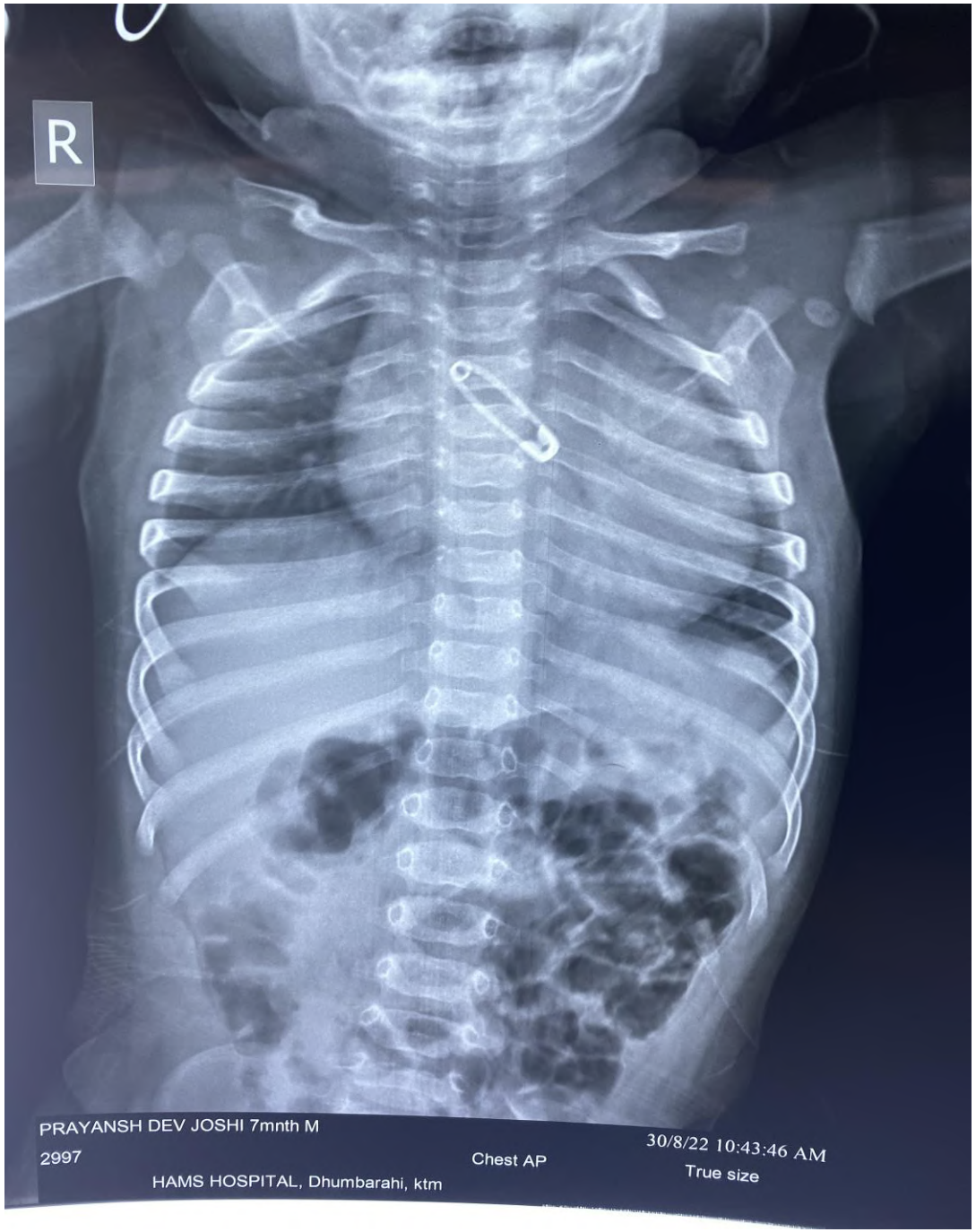
6 years male



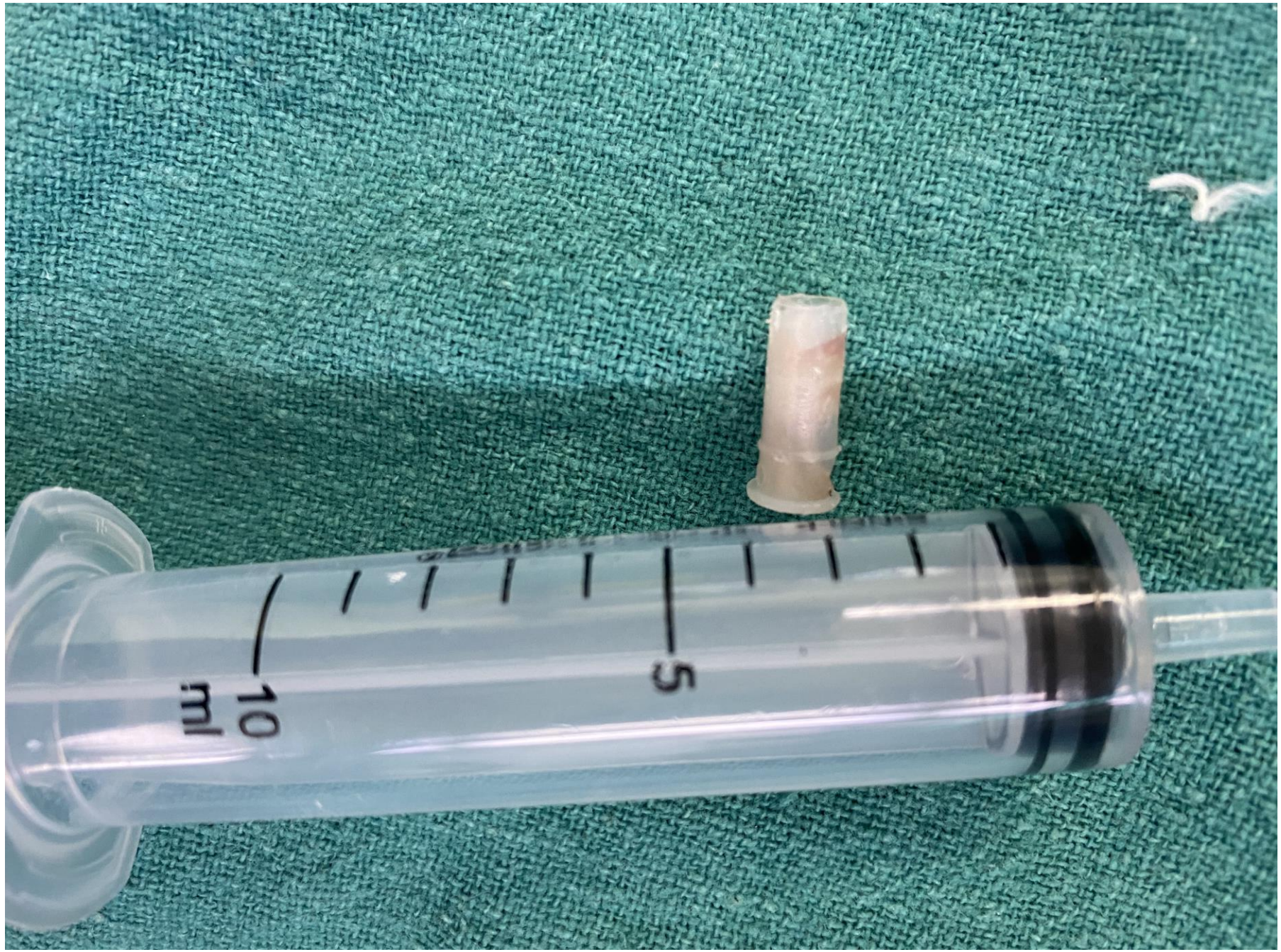

ANMOL SUNAR 6M 01797
ChestErect PA



A stone


R
PRAYANSH DEV JOSHI 7mnth M
2997
HAMS HOSPITAL, Dhumbarahi, ktm
Chest AP
30/8/22 10:43:46 AM
True size


5
10
ml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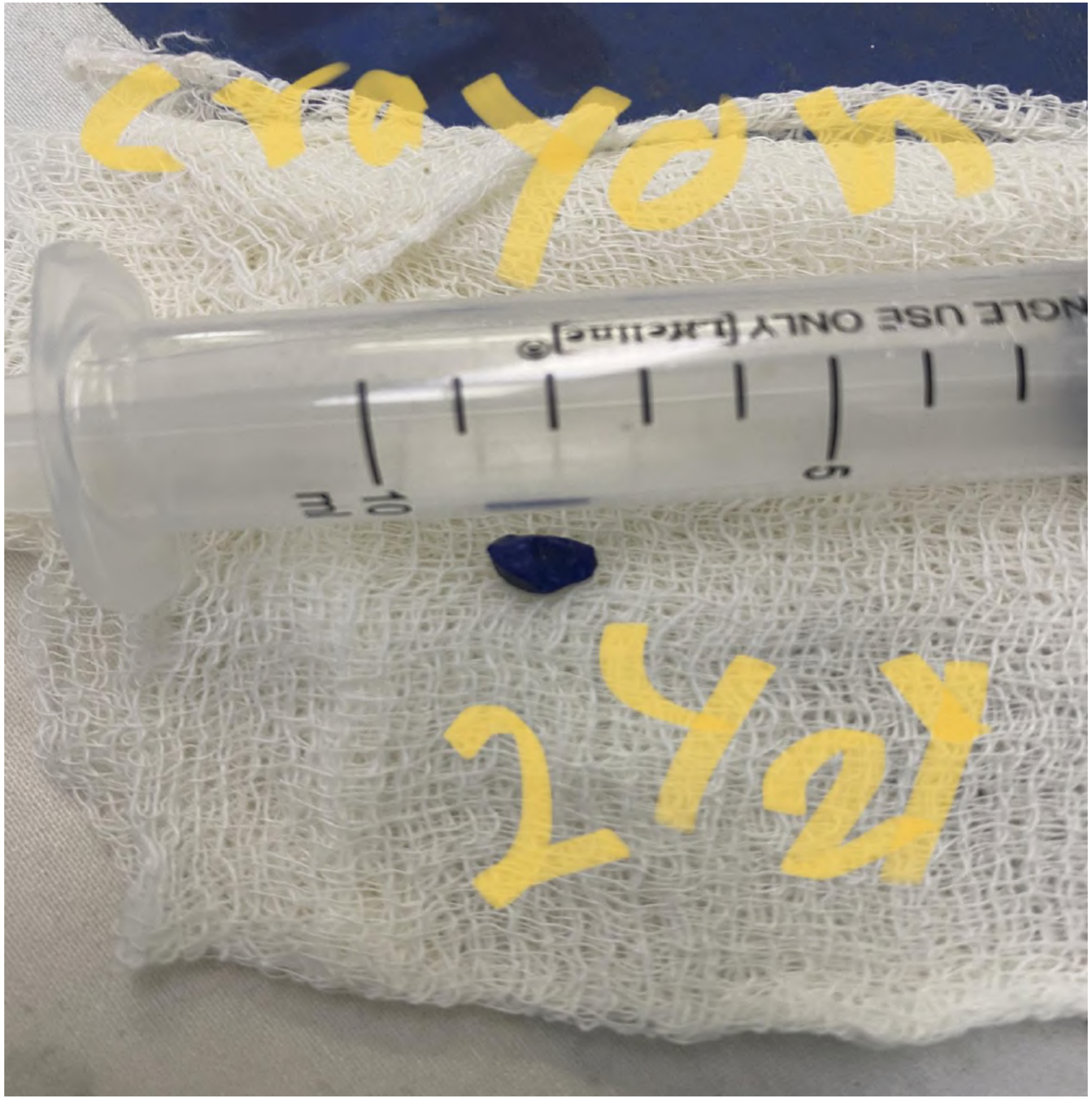
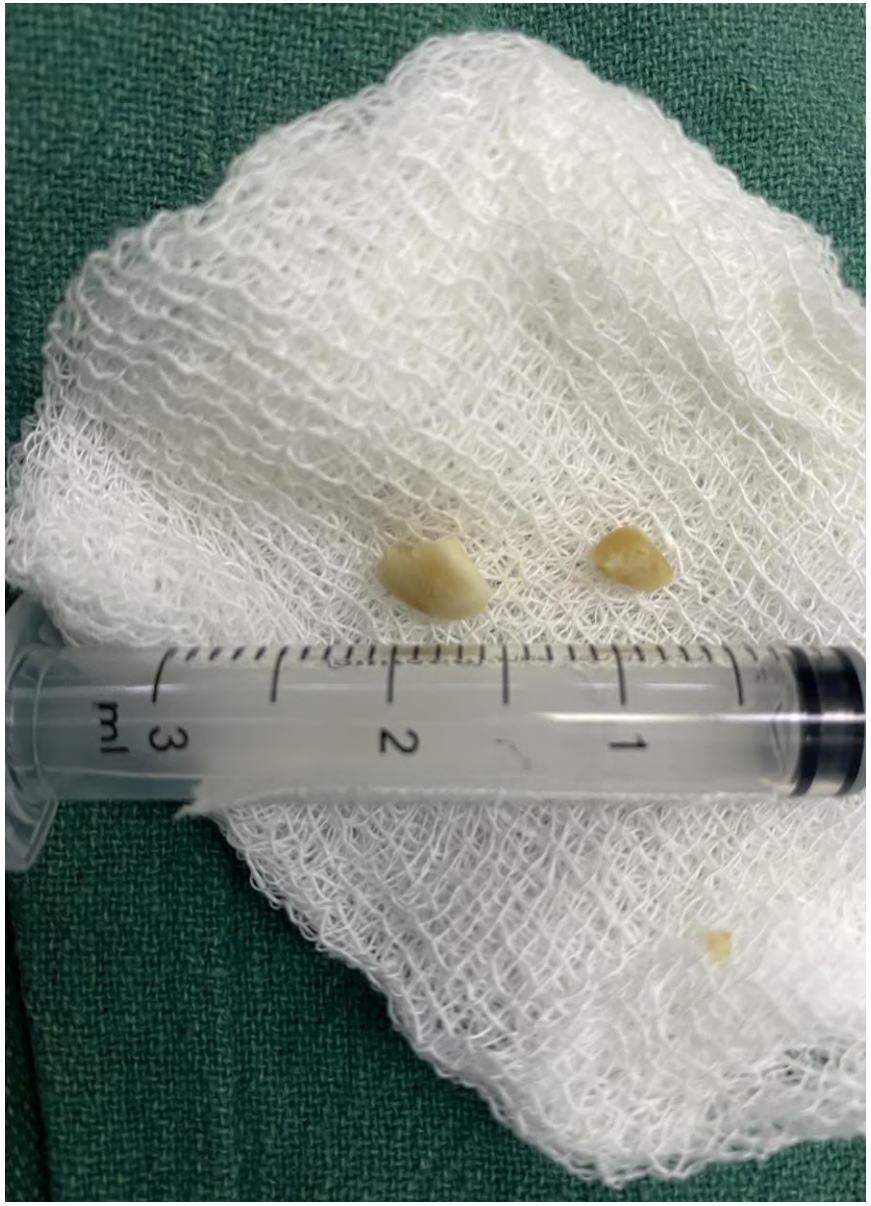

crayon
NGLE USE ONLY [Lifeline]®


3
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3
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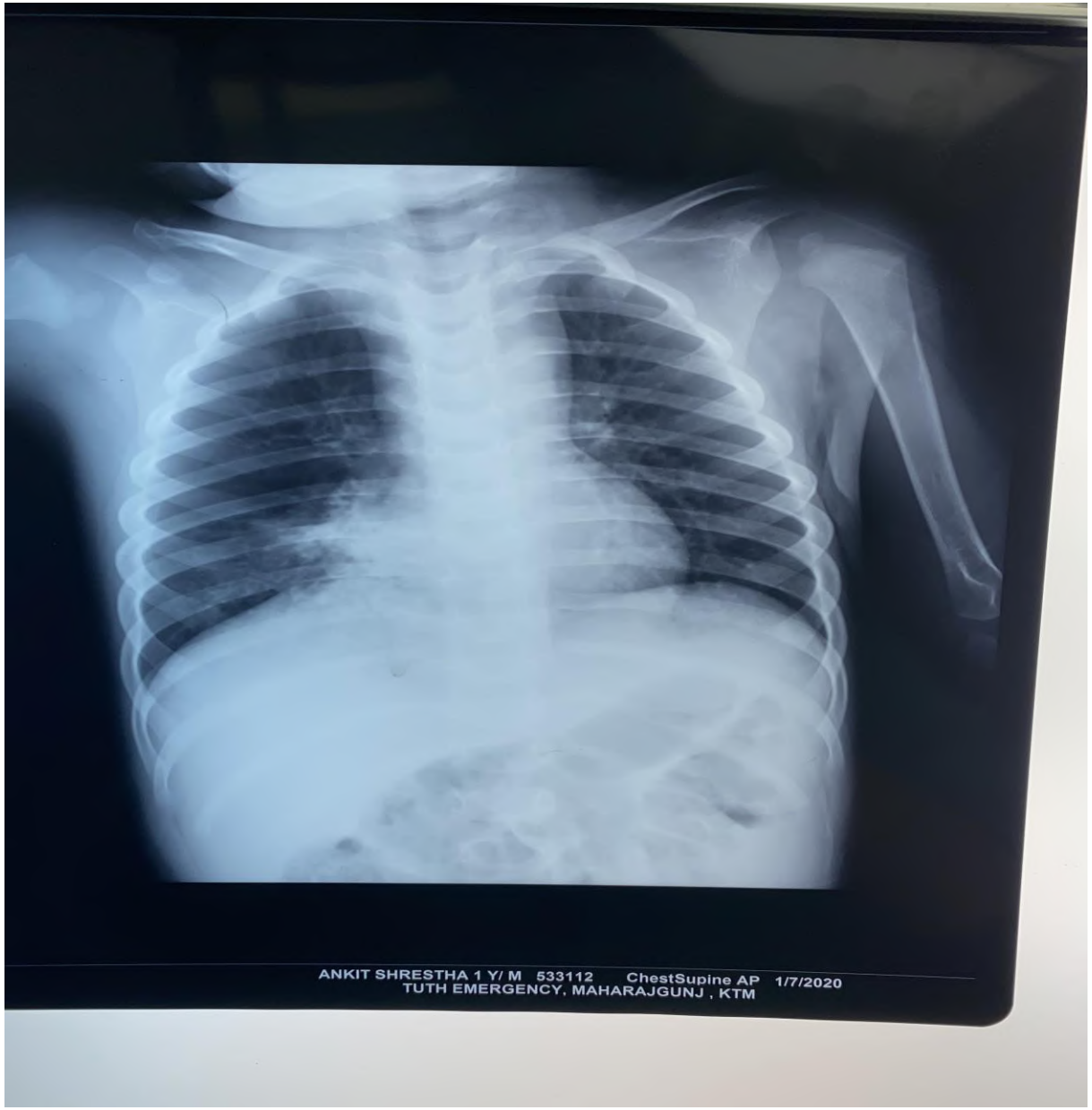
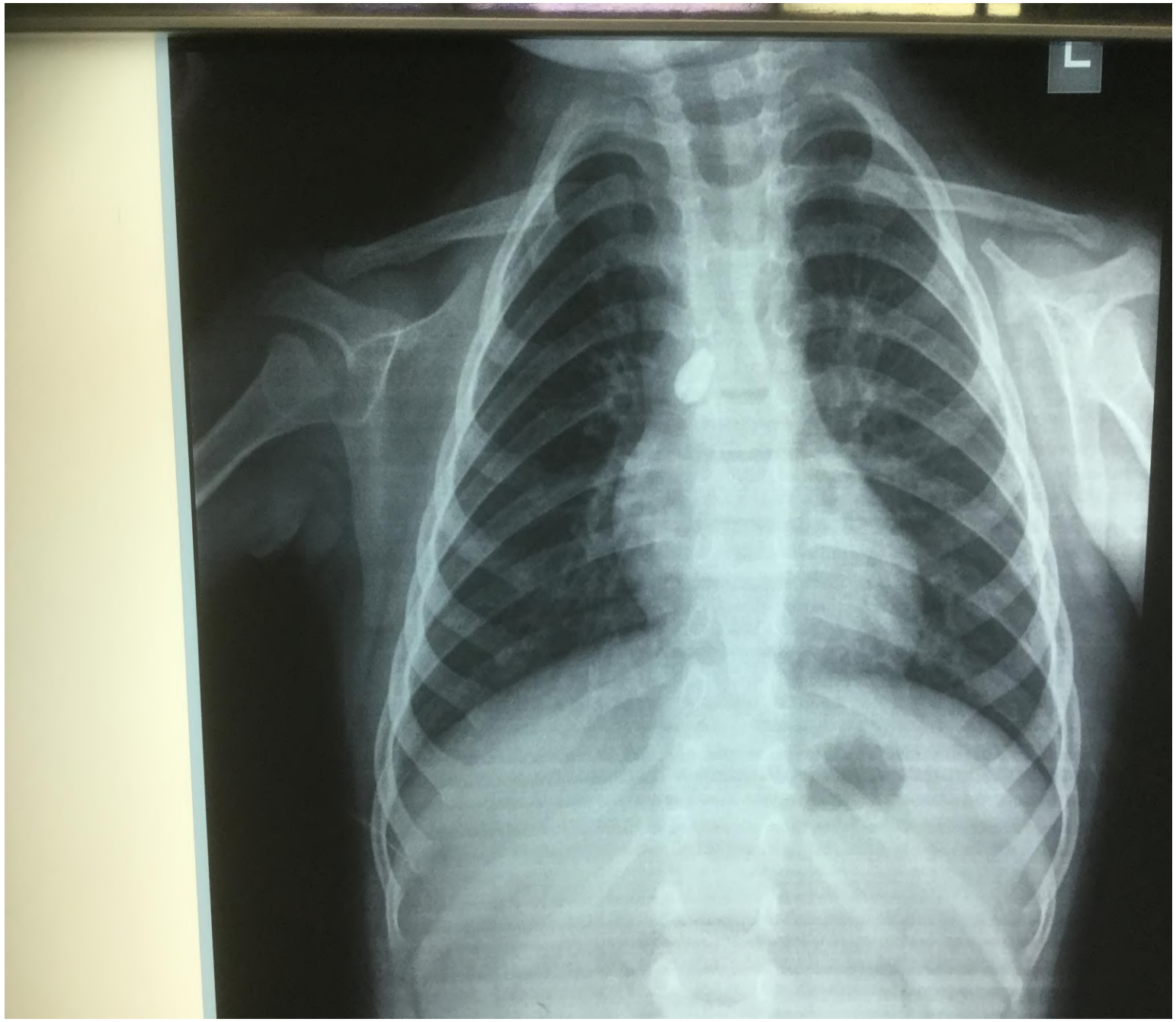
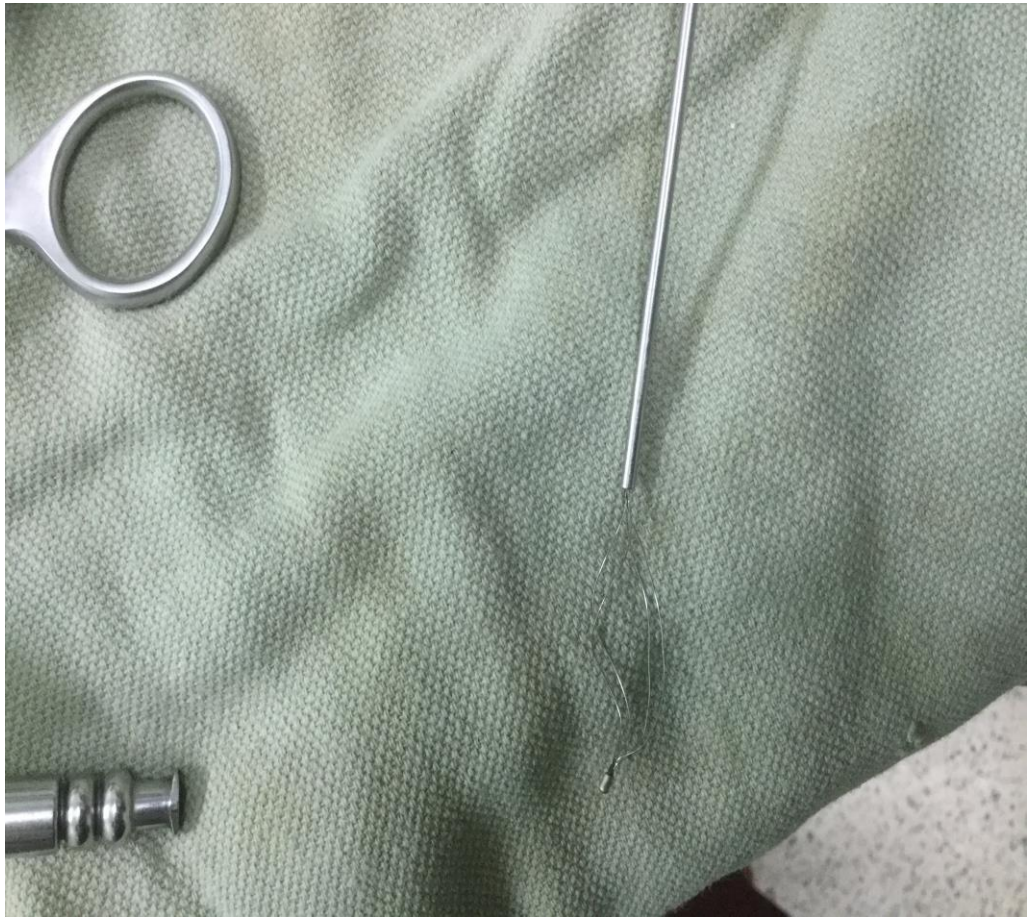

ANKIT SHRESTHA 1 Y/ M 533112 ChestSupine AP 1/7/2020
TUTH EMERGENCY, MAHARAJGUNJ , KTM

- 2 years
- 4 days
- Witnessed ingestion
- Cough
- Vomiting



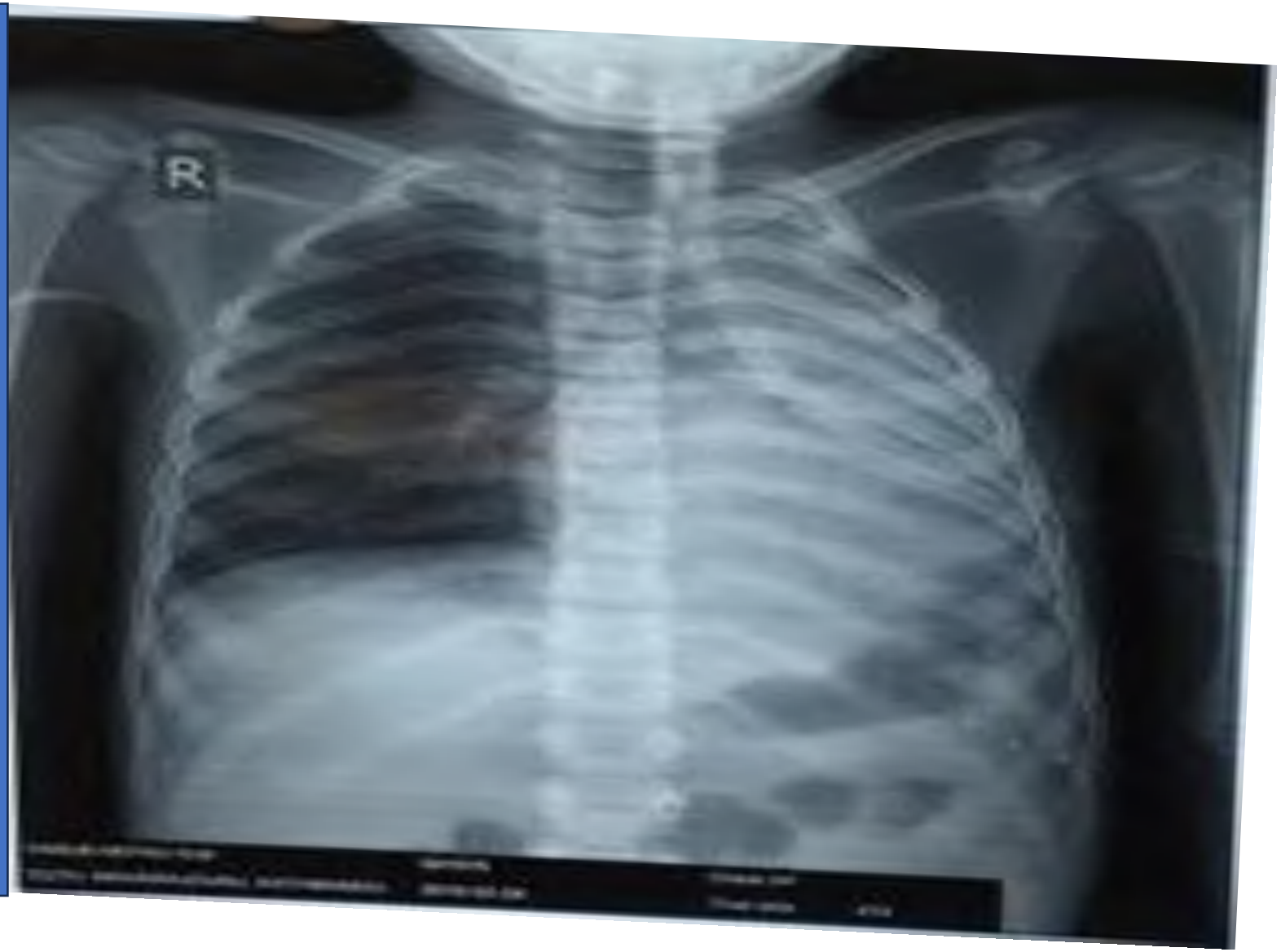
Removed by dermia basket on 4th attempt

Bead of Necklace



CASE 2

- 6 years
- 16 kg
- 10 days
- Witnessed Pencap
- Cough, vomiting
- 92% Saturation
- Tachycardic



- Multiple attempts
- Desaturation
- Atropine and Adrenaline
- Difficult to bag mask
- Bronchoscopy dropped to other side
- Well ventilated
- Abandoned
- Later thoracotomy

- 6 months
- Referred from out of valley
- 5 days
- Cough, stridor
- Bubble CPAP with Oxygen
- NPL- FB at subglottis

Pencil dirt

Foreign body Bronchus cases details

- Seasonal
- No specific pattern of distribution of patients
- Around 30 per year
- Male> Female (5:1)
- 10 months to 5 years
- Witnessed – almost 50 % cases
- Types
  - Organic – 50% (Peanut> Maize> Coconut> Almond)
  - Inorganic-50% (whistle> Pen cap >Necklace bead > Metallic pin/Safety pin)

Premedication:

- Hydrocortisone: 5 mg/kg
- Glycopyrrolate: 0.01mg/kg

Conduction of Anesthesia

Induction

- IV -Propofol
- Gaseous- Previous Halothane now sevoflurane

Muscle Relaxant

- Succinylcholine
- Vecuronium
- Now can switch to Rocuronium due to availability of Sugamadex

Methods of Ventilation

1. Apneic Oxygenation
   - Oxygen insufflation
   - Manual Jet Ventilation – Previously
   - Modified Jet Ventilation

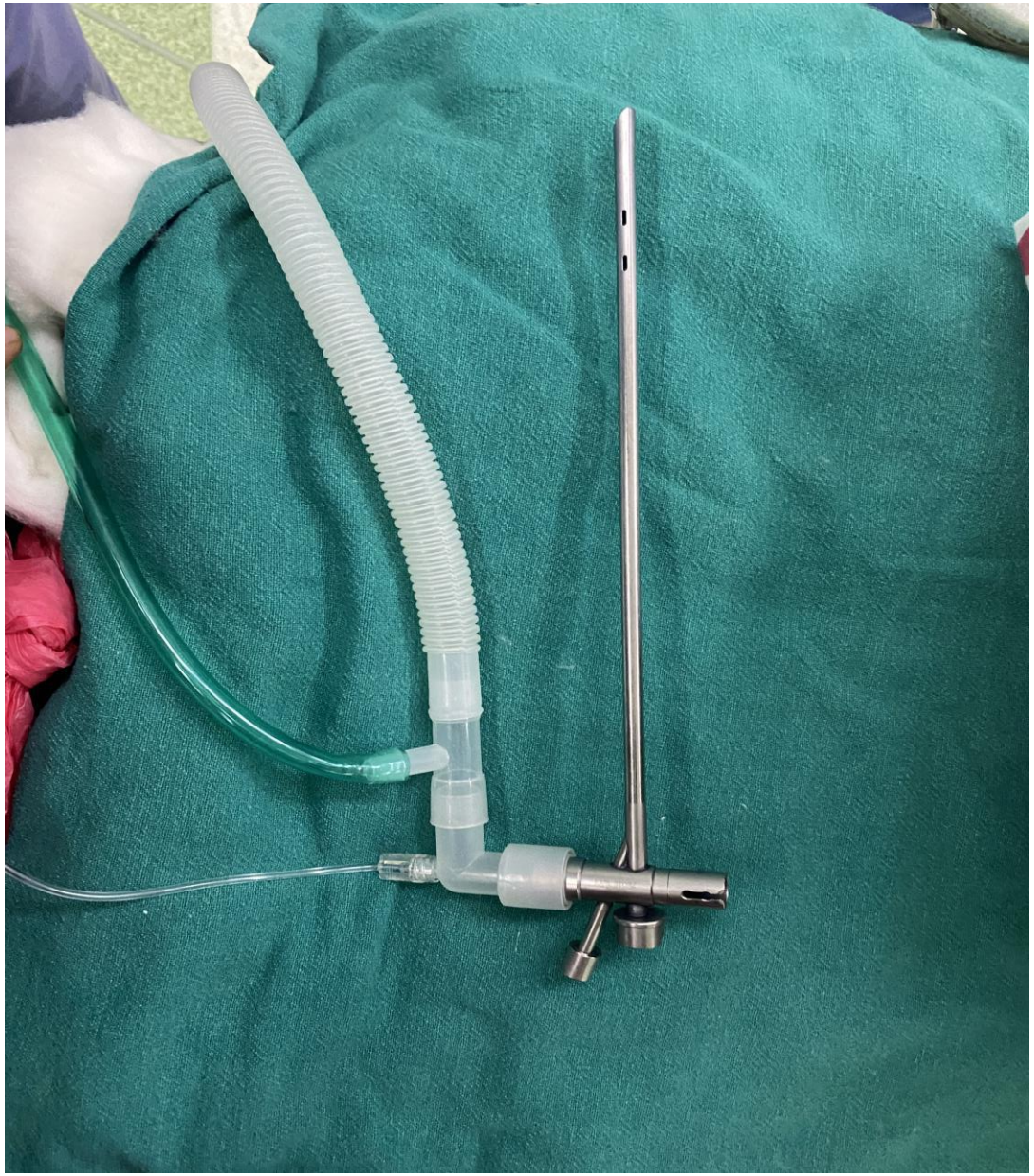
2. Positive Pressure Ventilation

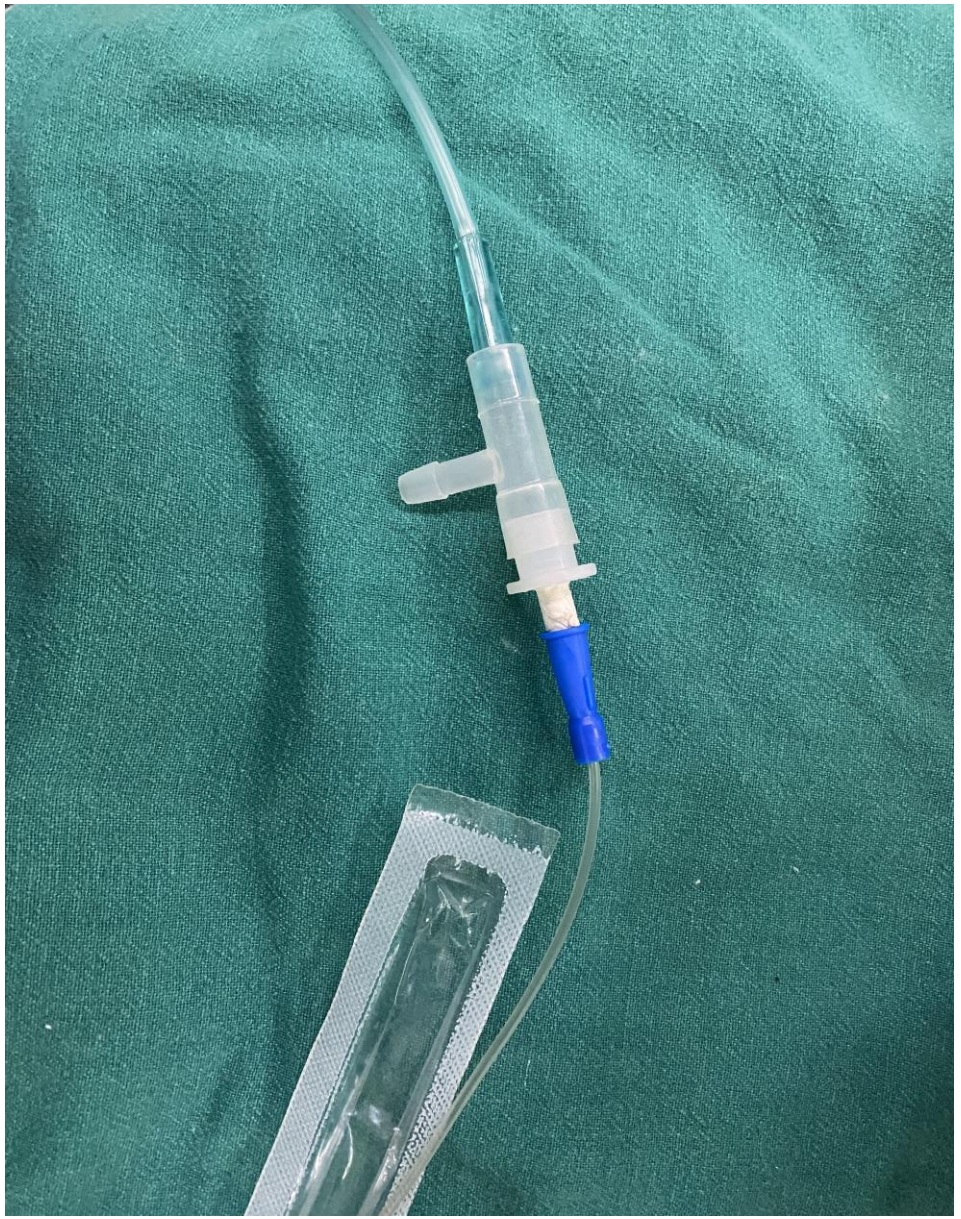
   Side port by Jackson Rees circuit

3. Spontaneous ventilation

4. High frequency Jet Ventilation

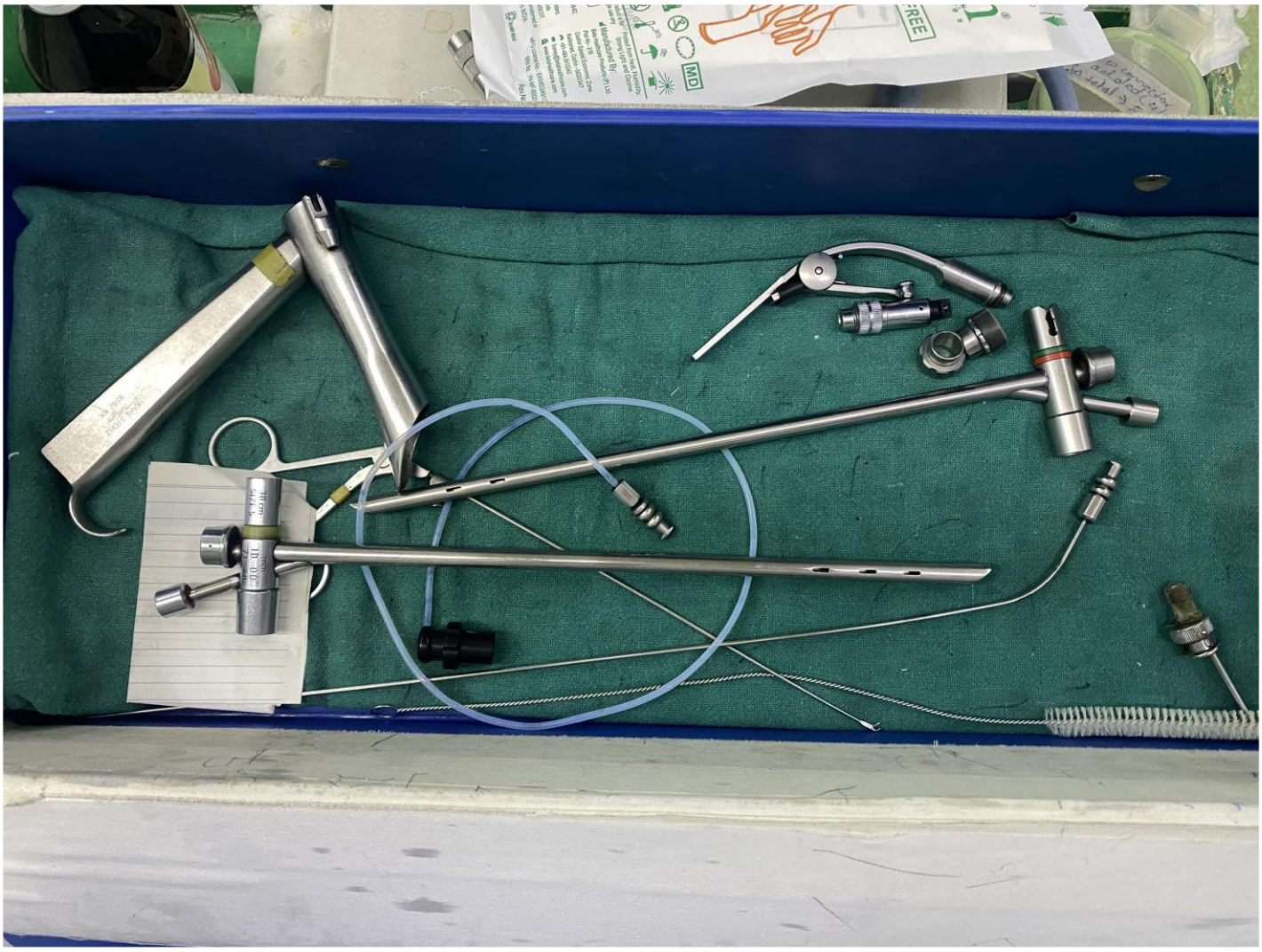
Manual Jet Ventilation

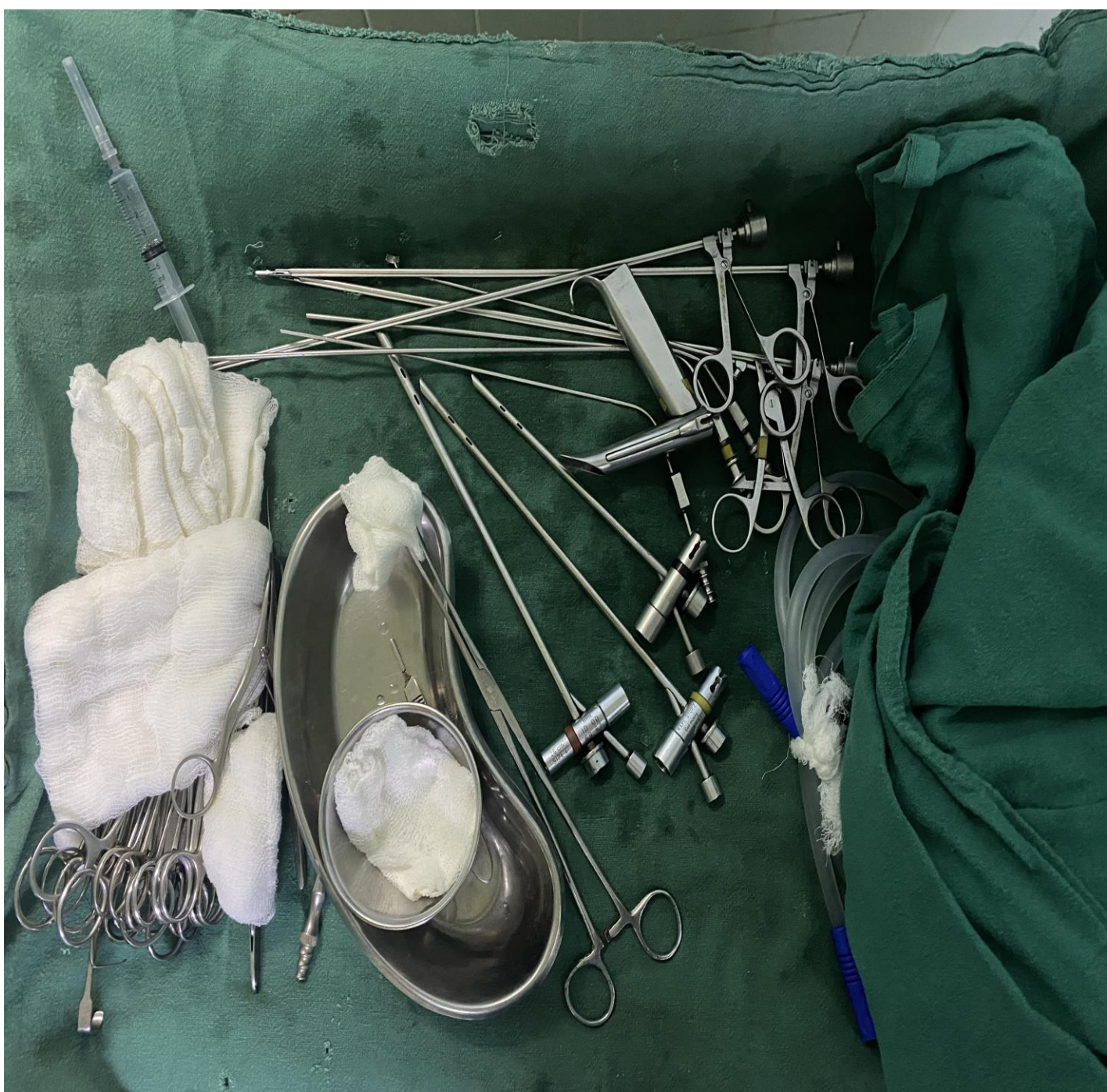




Maintenance

- Propofol infusion/ intermittent bolus
- Midazolam
- Side port → Inhalational agent → Isoflurane
- Vecuronium






MONITOR
mistral-air plus

After retrieval of FB bronchus

- Ventilate with appropriate/smaller size endotracheal tube
- Recruit lungs → atelectasis → PPV
- Extubate on table after
  - Discuss with ENT surgeon
  - Ruling out Bleeding/ Airway injury / edema of airway
- Send to Pediatric ICU
  - Perform cuff leak test
  - Extubate gradually

If FB can’t be retrieved

- Next setting → Thoracotomy backup
- Few cases thoracotomy at Cardio-vascular Thoracic Centre in the same premises

Few cases:

- FB removed by tracheostomy with ETT pulled up → Size of FB bigger than Vocal cord
- FB Dropped down to distal bronchus and removed after thoracotomy

The number of cases are going down at our institute

- Decentralized
- Probably incidence of Foreign body gone down
  - Education
  - Information at national newspaper
  - Social media

Challenges:

- Equipment→ Smaller size Bronchoscope
- Jet ventilation
  - Manual
  - High Frequency
- Investigation – CT scan
- Registry

24 th Annual Conference of the Society of Anesthesiologists of Nepal (SANCON 2025)

&

21st Meeting of the Asian Society of Paediatric Anaesthesiologists (ASPA 2025)

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