



THE LODOX SOLUTION IN TRAUMA & EMERGENCY MEDICINE

Presenter
Date

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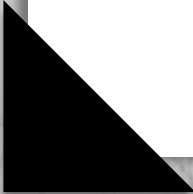
WHO IS LODOX SYSTEMS?




South African company
founded in 2002



Background as security
scanner for the diamond
mines.



All machines are
handmade on site in
Sandton, South Africa.



Subsidiary in North
America, Lodox Systems
NA LLC.

OUR STORY



- The technology was originally developed for the detection of stolen diamonds.
- What was needed
 - Fast throughput
 - Low radiation dose
 - High image quality
- Further innovations adapted the system for medical purposes.
- The Lodox-solution is incredibly well-suited for operation in trauma hospitals and forensic pathology facilities.

LODOX PRODUCTS



2001
STATSCAN



2012
XMPLAR-DR



2017
EXERO-DR

LODOX KEY FEATURES



- Complete answers: 1 full-body scan



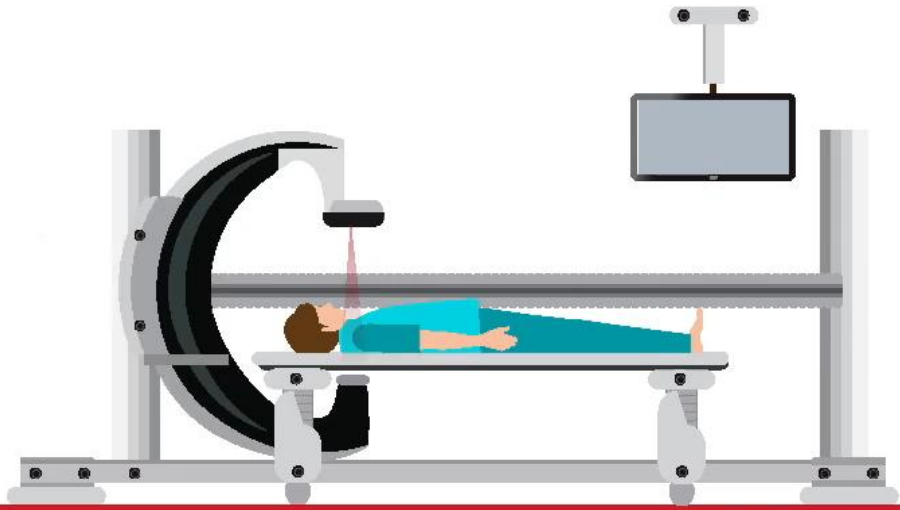
- High-speed: 13 seconds



- High image quality: clinically equivalent or in other views, better than that of conventional X-ray



- Negligible scattered dose: Radiation-safe zone just 1m from the machine



X-RAY
ROOM

THE LODOX WORLD



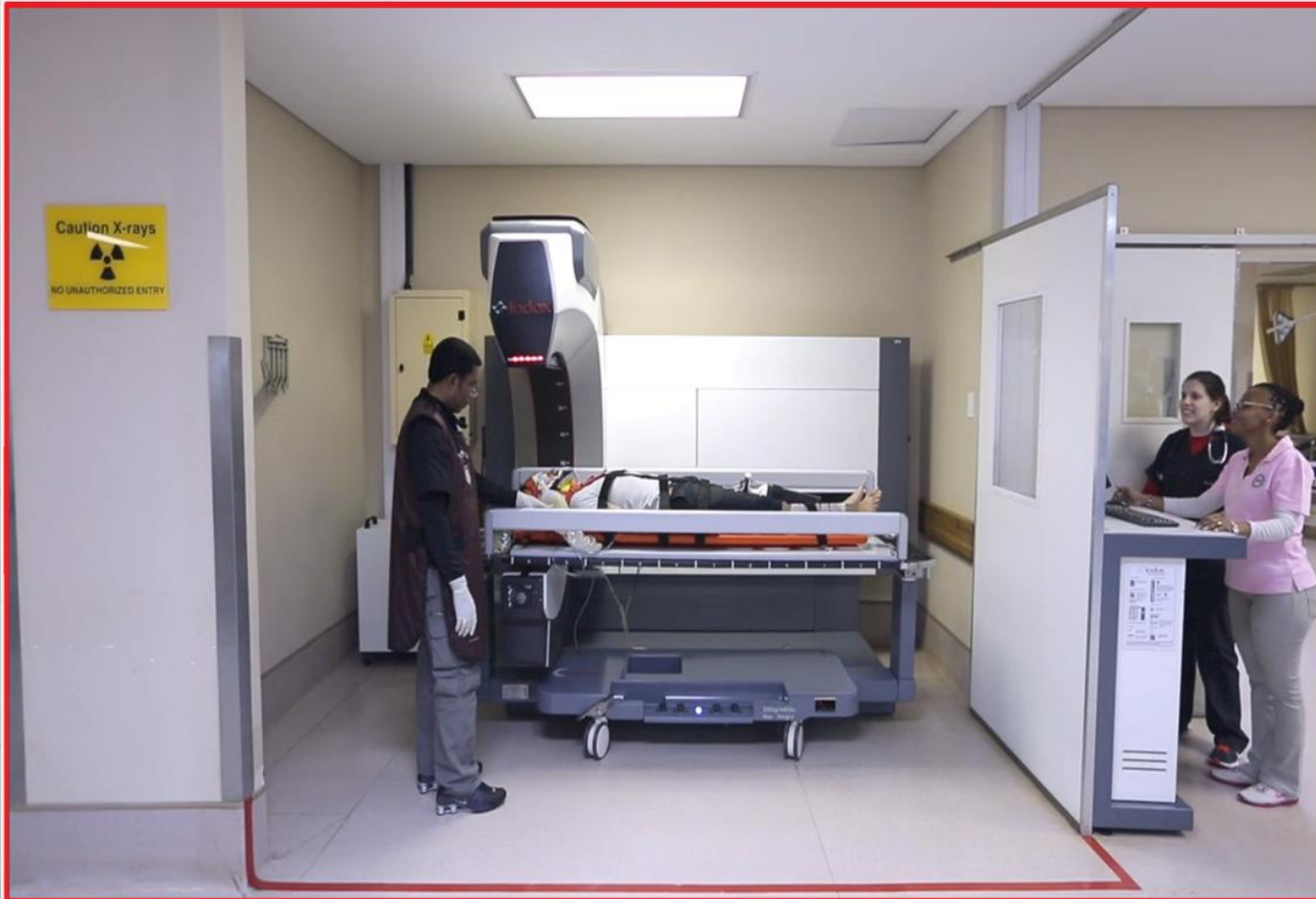
Total Installations = 164

WHY LODOX IN TRAUMA?

TYPICAL TRAUMA INSTALLATION

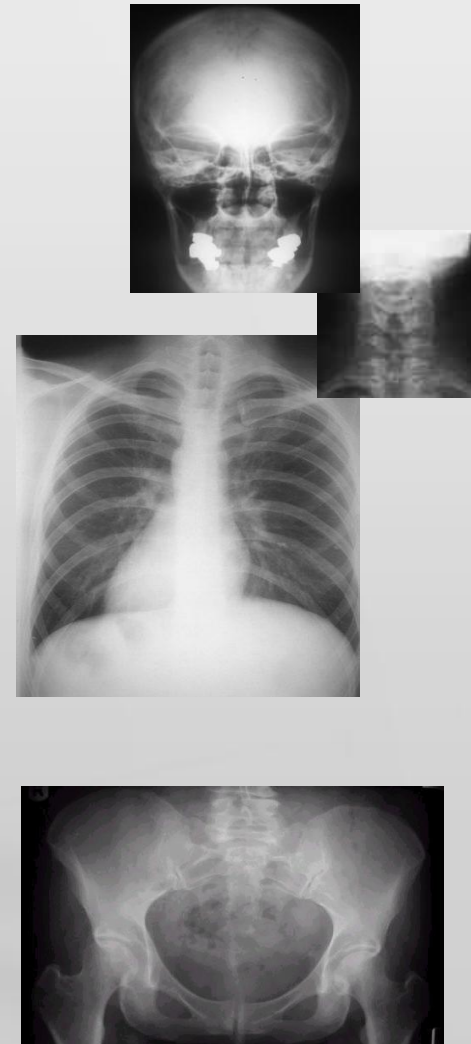
- Proximity to resus
- Rapid Diagnosis
- Minimal Patient Handling
- Whole Body Imaging
- Low Radiation Dose
- High Image Quality
- Reduces Radiology Workflow

SUMMARY: Lodox is used in Trauma because it enables rapid, full-body, low-dose imaging with minimal patient movement - ideal for critically injured patients.



LODOX VS CONVENTIONAL X-RAY

- 1.88m x 0.72m
- No stitching
- No retakes
- AP image in < 1 minute
- Complete AP & Lateral < 5 min
- 99 μ Sv



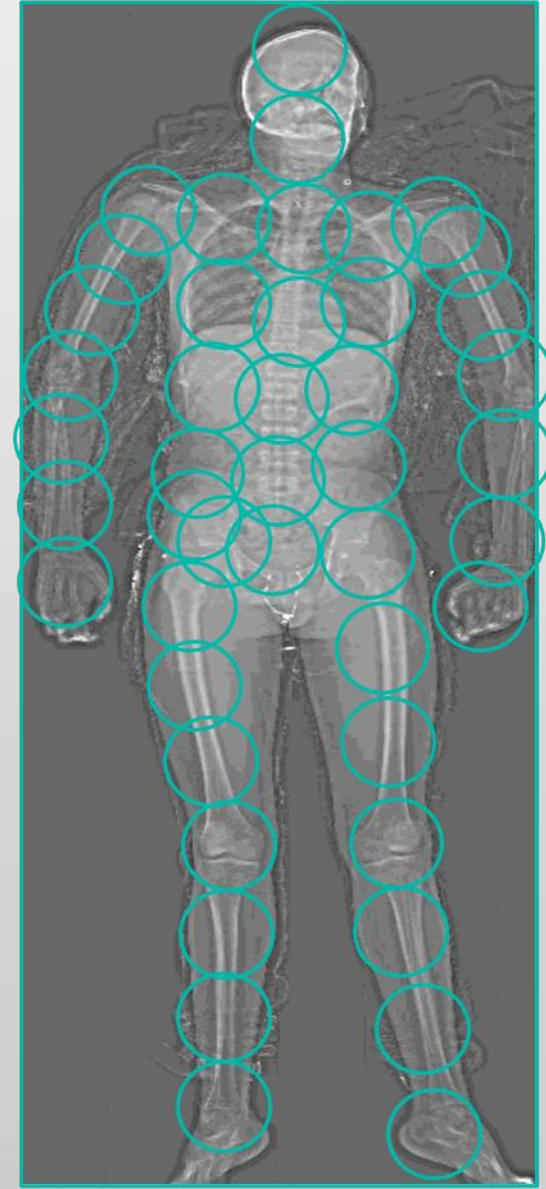
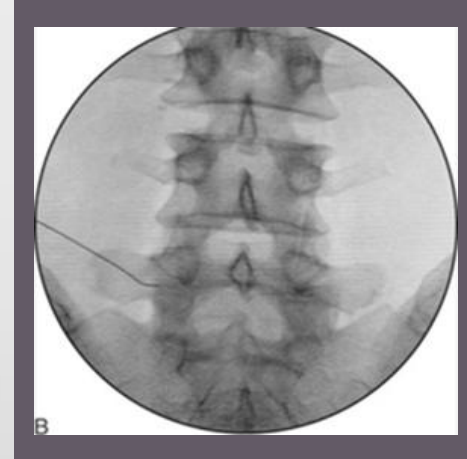
- Partial Fields-of-View
- Limited information
- Avg. 45 min
- Skull, chest, pelvis, C-spine
- 713 μ Sv per X-ray



LODOX VS FLUOROSCOPY C-ARM

The diameter of a typical fluoroscopy image is ± 30 to 35cm.

The blue circles on the full body image is used to indicate that typically numerous scans using the fluoroscopy would have to be taken to get a full body visual image of the body.



LODOX TRAUMA INDICATIONS

- Multiple gunshot wounds *
- Pediatric imaging
- Bariatric patients imaging
- Foreign body detection
- VP Shunts
- Poly-trauma
- Body packers
- Metastasis

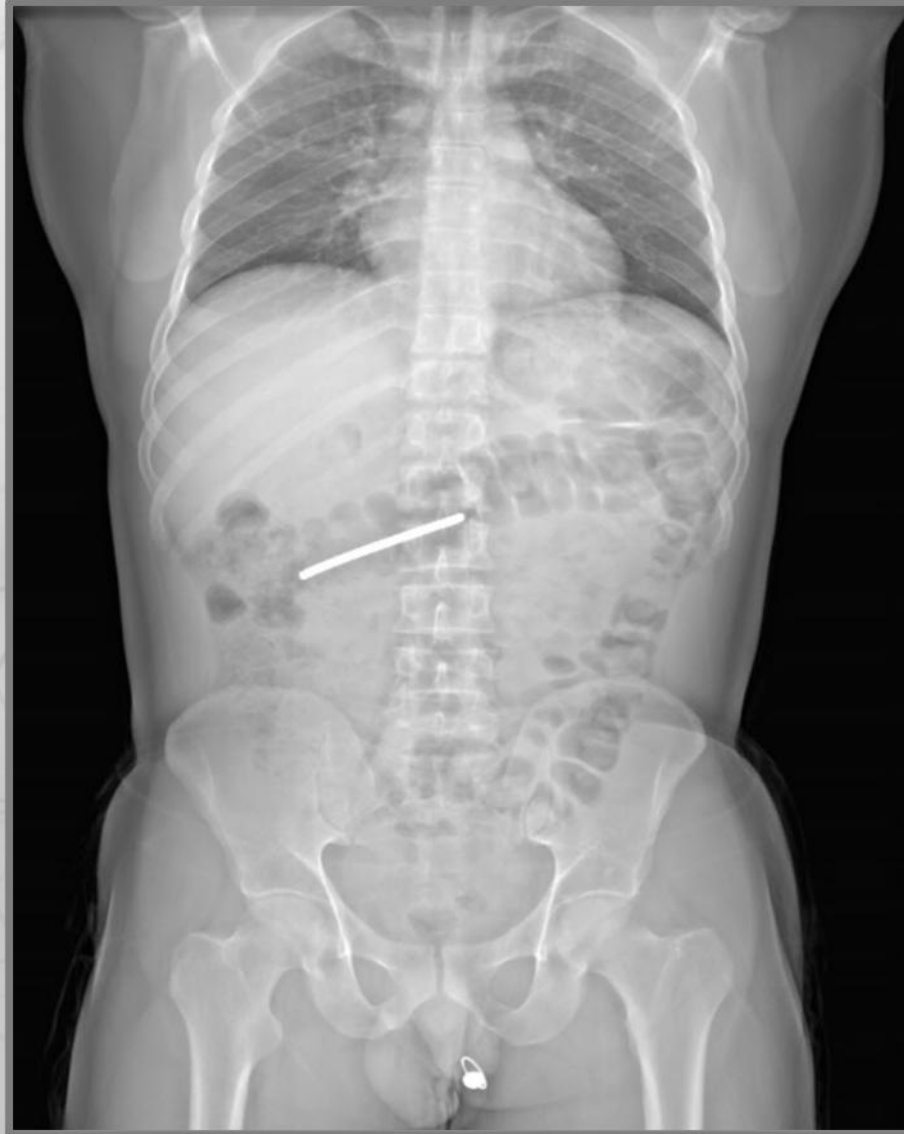
PAEDIATRIC IMAGING



BARIATRIC PATIENTS IMAGING



FOREIGN BODY DETECTION



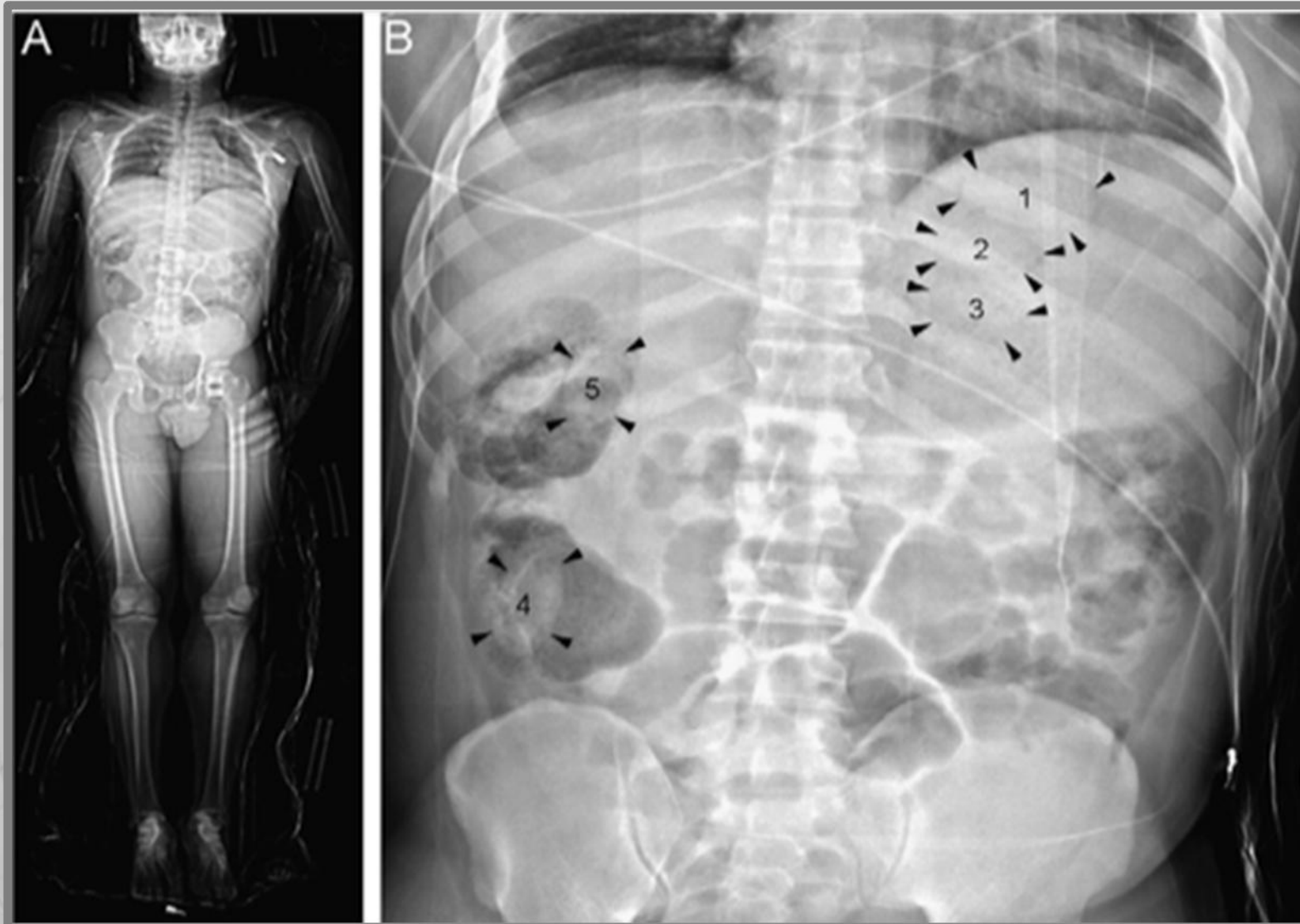
VP SHUNTS



POLY-TRAUMA



BODY PACKERS



METASTASIS

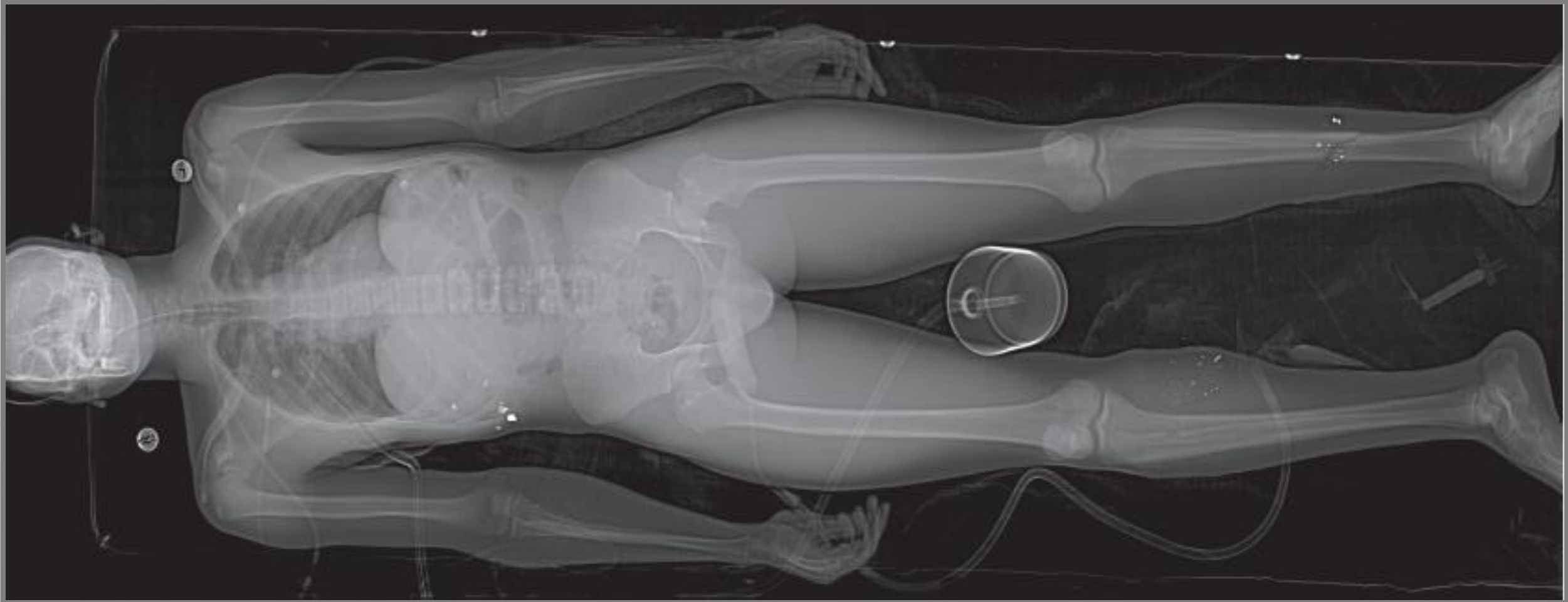


LODOX TRAUMA CASE STUDY: GUNSHOT



- Unresponsive patient arrives at a hospital in Cape Town by ambulance
- Evidence of gun shot wounds
- Patient loaded onto Lodox trolley

PATIENT LODOXED



PATIENT LODOXED

1. Right Hemopneumothorax
2. Bullet fragments in left upper quadrant
3. Bullet fragments, left lateral abdomen
4. Bullet fragments, pelvis
5. Right proximal fibula fracture
6. Bullet fragments, right lower leg
7. Left tibia fracture

