

CONGRESSO NAZIONALE SOCIETÀ ITALIANA FISSAZIONE ESTERNA

Fissazione esterna nel trattamento
delle emergenze e traumi militari,
tecniche di ricostruzione degli arti e
trattamento degli esiti posttraumatici

ROMA

2025

16-17 MAGGIO 2025



ROMA



CONGRESSO NAZIONALE
SOCIETÀ ITALIANA
FISSAZIONE ESTERNA



16-17 MAGGIO 2025

Fissazione esterna nei paesi a risorse limitate: nuova gestione del trauma acuto e cronico

Dr. Luigi Paolo Spreafico
Ospedale San Paolo - Milano



16-17 MAGGIO 2025

Disclosure

In riferimento a questa relazione,

non ho alcun conflitto di interessi

Obiettivi:

- Dare un contesto per le condizioni di Lavoro in ambito ortopedico\traumatologico in Paesi a basso reddito;
- Descrivere i presidi utilizzati per la Tele – Ortopedia, intesa come Mentoring a distanza
- Valutare vantaggi e svantaggi della metodica

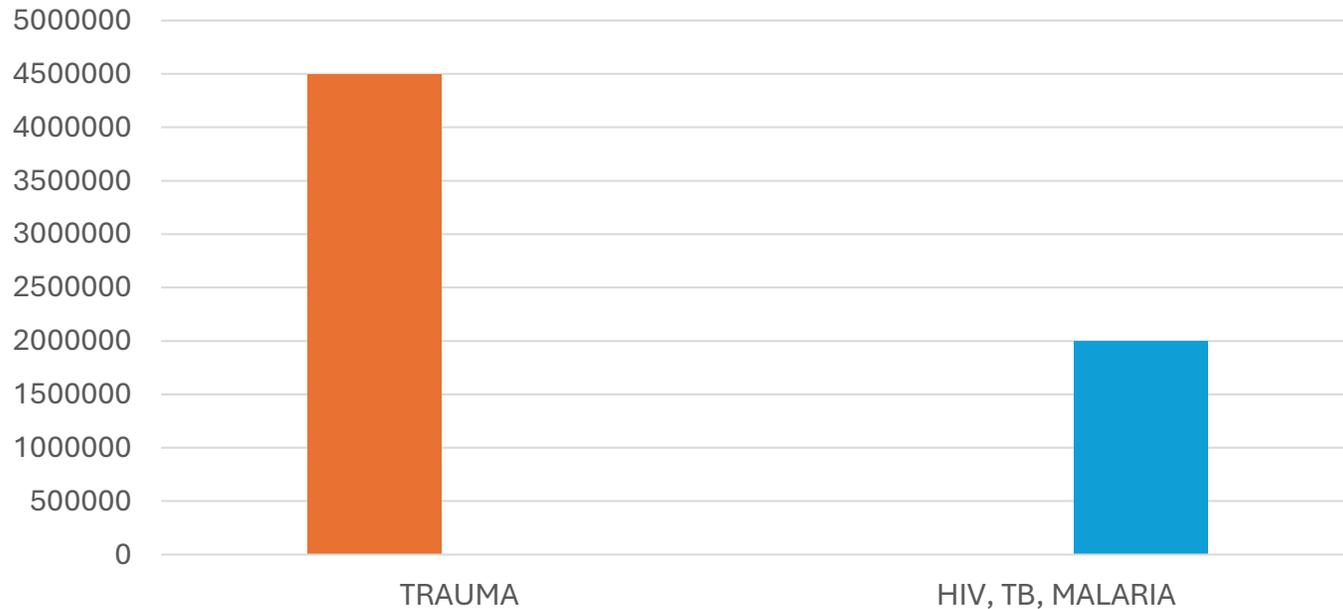
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Injury: a neglected global health challenge in low-income and middle-income countries

[Simon Matthew Graham](#)^a  · [Linda Choko](#)^b · [Nyengo Mkandawire](#)^e · [Maritz Laubscher](#)^c · [Sithombo Maqungo](#)^d · [Billy Haonga](#)^f · et al.

MORTI VANNO IN LMIC



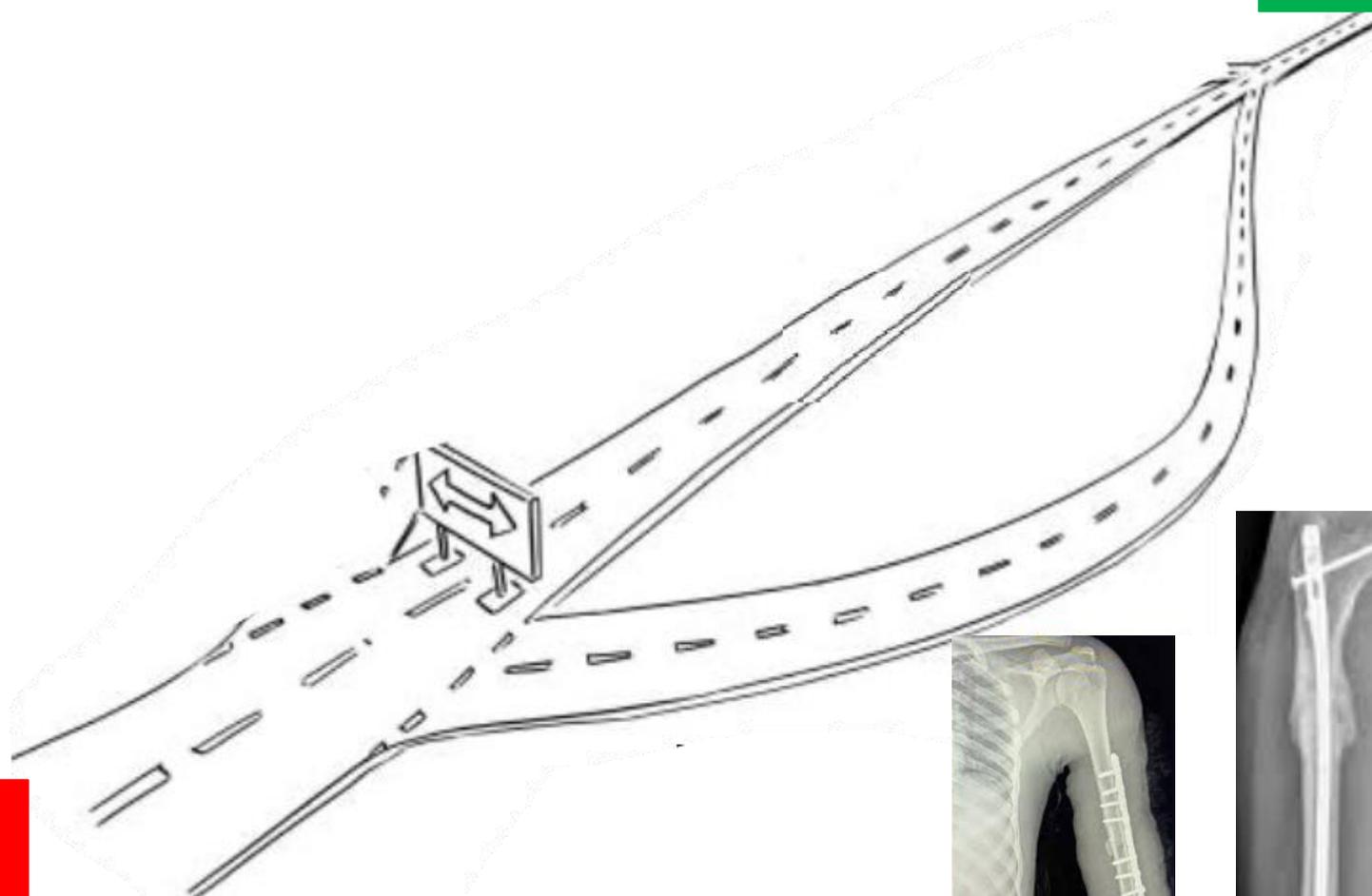
ROMA



CONGRESSO NAZIONALE
SOCIETÀ ITALIANA
FISSAZIONE ESTERNA

16-17 MAGGIO 2025

RECUPERO



TRAUMA



SECOND OPINION

FAMIGLIA

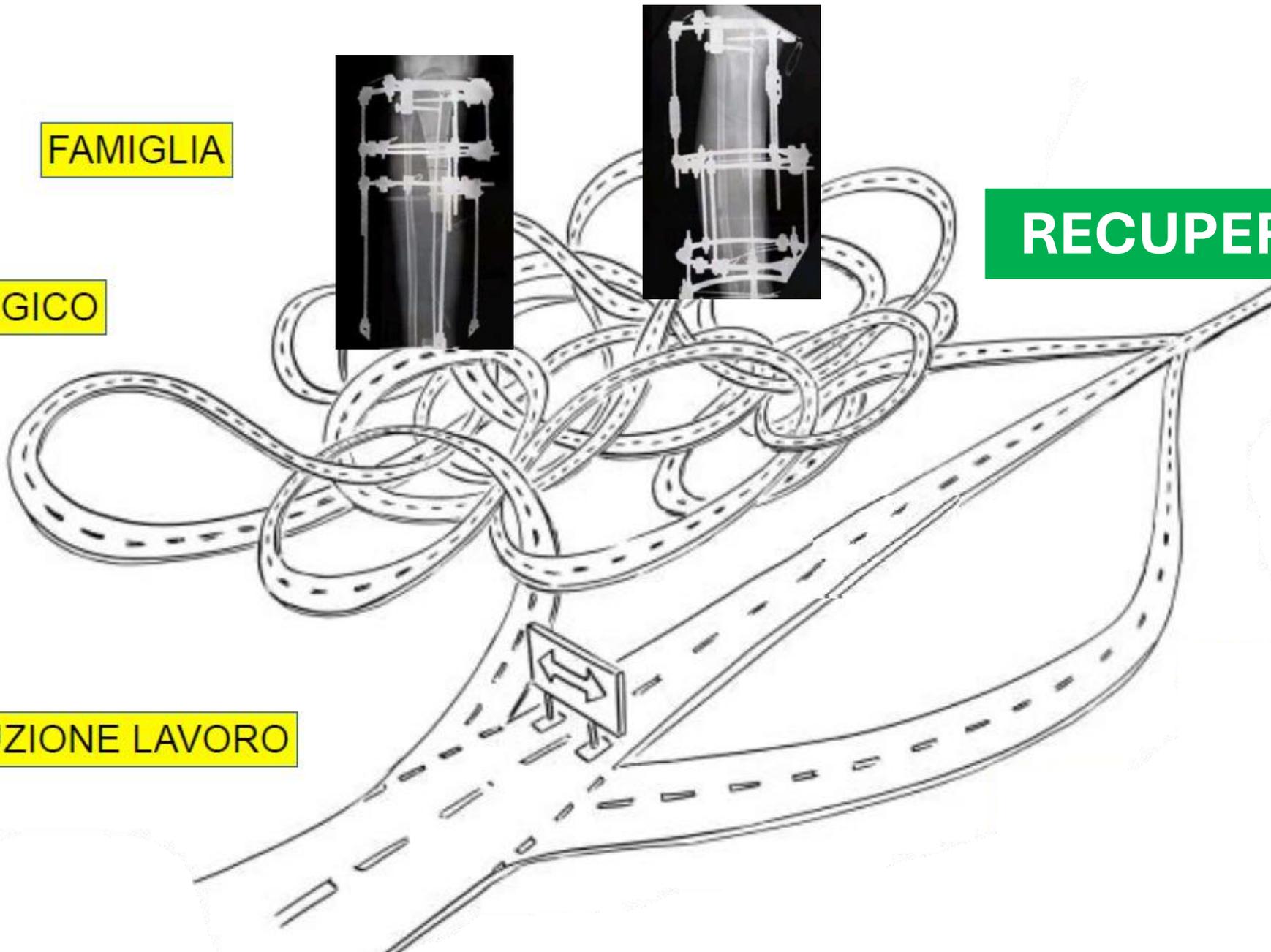
CHIRURGICO

ECONOMICO

GESTIONE DOLORE

INTERRUZIONE LAVORO

TRAUMA



RECUPERO

Maralal Samburu County



Amministrazione

Capoluogo Maralal

Territorio

Coordinate del capoluogo  1°05'35"N 36°42'05"E

Superficie 21 000 km²

Abitanti 143 547 (1999)

Densità 6,84 ab./km²





Malnutrizione < 2000KCal\die

70%

Povertà < 1\$\die

80%

Analfabetismo

90%

Vita media

61aa

Accesso ad acqua
corrente

10%

Distanza media dal
punto d'acqua

5km





Bed Sharing

Samburu County Referral Hospital

**Circa 200
posti-letto**

Dal 2017 ad oggi, circa 800 interventi

Dr: Daniele Sciuto Anästhesist: RACHAEL/SANKALE OR nurse: MUGAI/MAINA

ORTHOPEADIC and TRAUMA OPERATION LIST Date 27th NOVEMBER 2023

DATE	DAY	ORDER	PAT. NAME	SEX	AGE	WARD	DIAGNOSIS	OPERATION	C-ARM Y/N	NOTES
27/11	MON	1	DOMINIQUE NADORE	M	30	MAL	#ANKLE	PLATING	Y	DONE
27/11	MON	2	SYNTIA	F	28	FEM	TIBIA TRANSPORT	FRAME ADJUSTMENT	Y	DONE
27/11	MON	3	TUSKER LENGERDED	M	25	MAL	QUADRICEPT TEAR	REPAIR	N	DONE
28/11	TUE	1	ALAN LEADUMA	M	12	MAL	EXOSTOSIS	OSTEOTOMY	N	DONE
28/11	TUE	2	ALI LEKUSHALAN	M	25	MAL	#OPEN TIBIA	TIBIA TRANSPORT	Y	DONE
29/11	WED	1	NTEELI LEBASHA	M	25	MALE	#RADIO ULNA	PLATING	N	
29/11	WED	2	LOTEKU LENCHODA	M	32	MALE	PATELLA TENDON RAPTURE	TENDON REPAIR	N	
30/11	THURS	1	MODUDA LEKONIRAI	M	35	MALE	#FEMUR+EX FIX+FASCIOTOMY	RECON NAIL + SKIN GRAFT	Y	TRACTION TABLE
30/11	THURS	2	MESHAK LEKULA	M	23	MALE	#RADIO ULNA	PLATING	N	

ORTHO TRAUMA LIST

Dr: Daniele Sciuto Anesthetist: Beatrice/Baya OR nurse: MAINA

ORTHOPEADIC and TRAUMA OPERATION LIST Date 7rd AUGUST 2023

DATE	DAY	ORDER	PAT. NAME	SEX	AGE	WARD	DIAGNOSIS	OPERATION	C-ARM Y/N	NOTES
8/8	TUES	1	CECILIA LORIPON	F	65	FEMALE	#NECK OF FEMUR + HARWARE FAILURE	HEMIARTHROPLASTY	N	
8/8	TUES	2	ACHOLE LESARKOL	F	65	FEMALE	#TIBIA	SIGN NAIL	Y	
9/8	WED	1	FREDRICK	M	14	PEDS	#FEMUR	PLATING	Y	
9/8	WED	2	NAEU LENADOKER	F	75	FEMALE	#NECK OF FEMUR	HEMIARTHROPLASTY	N	
10/8	THURS	1	LAZARUS	M	8	PEDS	#RADIO ULNA	K WIRE	Y	
10/8	THURS	2	WILLIAM LENTAYA	M	70	MALE	#INTERTROCH	PFN NAIL	Y	
11/8	FRY	1	JOSUPATH LEEMOGHE	M	40	MALE	#TIBIA PLATEU	PLATING	Y	

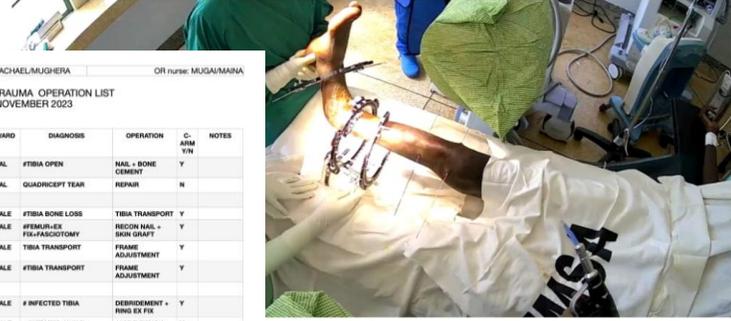
ORTHOPEADIC OPERATIONS LIST
WEEK FROM 24 TO 27 MAY

DR: DANIELE SCIUTO ANESTHETIST: PETER / FED O.R. NURSE: MAINA

DR KHATEETE

DATE	DAY	PATIENT NAME	SEX	AGE	WARD	DIAGNOSIS	OPERATION	FLUOR Y/N	NOTES
25/5	THUR	PETER LOUWAI	M	16	MALC	#FEMUR INTERC	ABS R-FIX	YES	
25/5	THUR	KATELA KATHA	M	29	MALE	#ABDO SWAB	PLATING	NO	
25/5	TUE	LENGERDED	F	39	FEM	#DIST TIBIA	NAILING	YES	
25/5	TUE	ALAN LEADUMA	F	28	FEM	#RICE FEMUR	DHS	YES	ORTH-BSD
26/5	FRID	SANDRA GUMA	M	47	MALE	#TIBIA	NAILING	YES	
26/5	FRID	SANDRA GUMA	M	47	MALE	#HUMERUS	PLATING	NO	

SAMBURU COUNTY REFERRAL HOSPITAL
ORTHOPEADICS



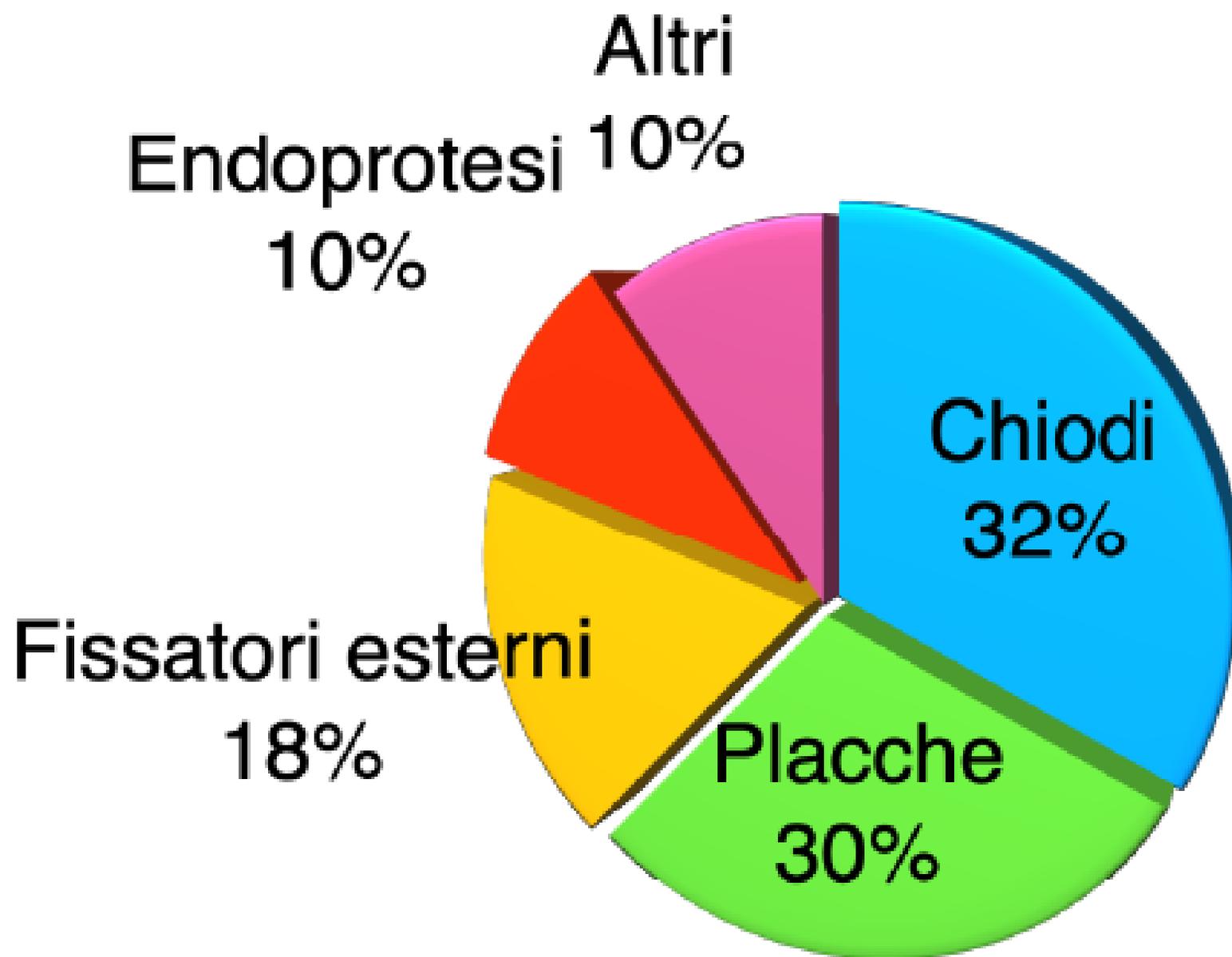
Anesthetist: Peter OR nurse: Maina

ORTHOPEADIC and TRAUMA OPERATION LIST Date 10th April 2023

DATE	DAY	OR ORDER	PAT. NAME	SEX	AGE	WARD	DIAGNOSIS	OPERATION	C-ARM Y/N	NOTES
11/04	TUES	1	MARIAMU LOLOSOL	F	80	FEM	#NECK OF FEMUR	EMYARTHROPLASTY	N	
11/04	TUES	2	MPOSA LENGWEWA	F	70	FEM	#FEMUR	NAILING	Y	
13/04	THURS	1	WYCLIFF ANGWENGI	M	35	MALE	TIBIA MALUNION	TAYLOR SPATIAL FRAME + TIBIA TRANSPORT	Y	
13/04	THURS	2	LENGEES KATERY	M	35	MALE	#TIBIA PLATEAU	PALTING	Y	



Ma andiamo per ordine....





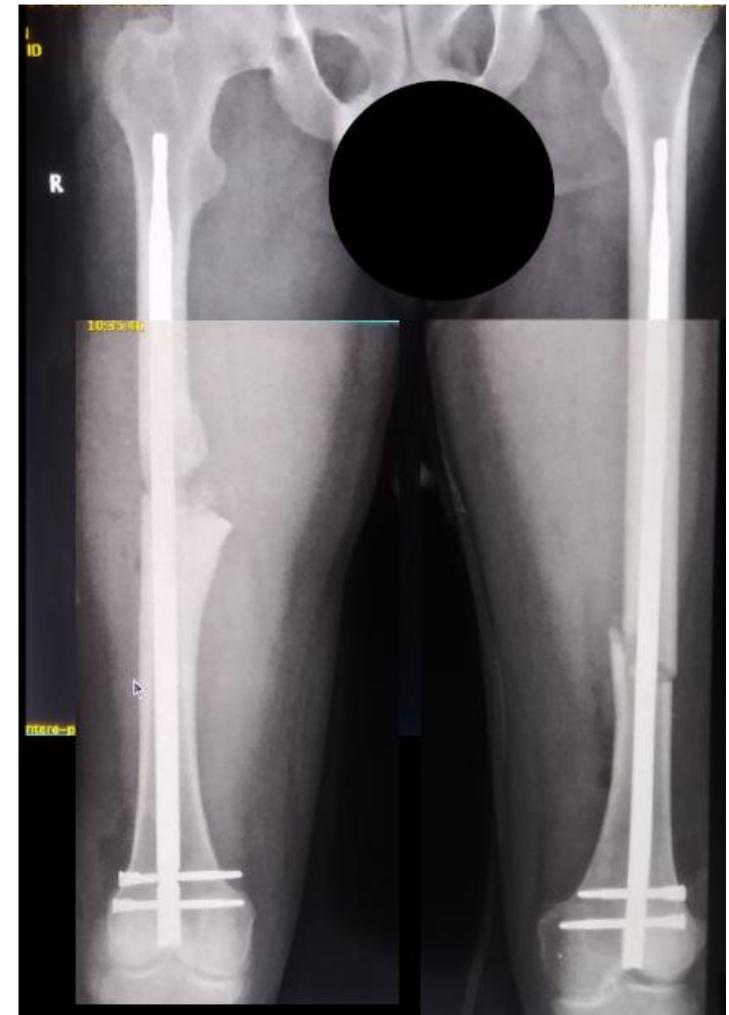
**1600 km di
rete
stradale**



**160 km di
asfalto**



Incidenti Stradali





Cadute da alberi









Ferite da arma da fuoco (fucili d'assalto)







REDMI NOTE 9 PRO
AI QUAD CAMERA



Primo Chirurgo

Secondo Chirurgo

Anestesista

Infermiere di sala

Strumentista

Infermiere di sala



Primi planning e procedure «Live» con Smartphone - 2017

LIMITI

Bassa qualità

Chiamate non stabili

Impossibilità ad avere le mani libere

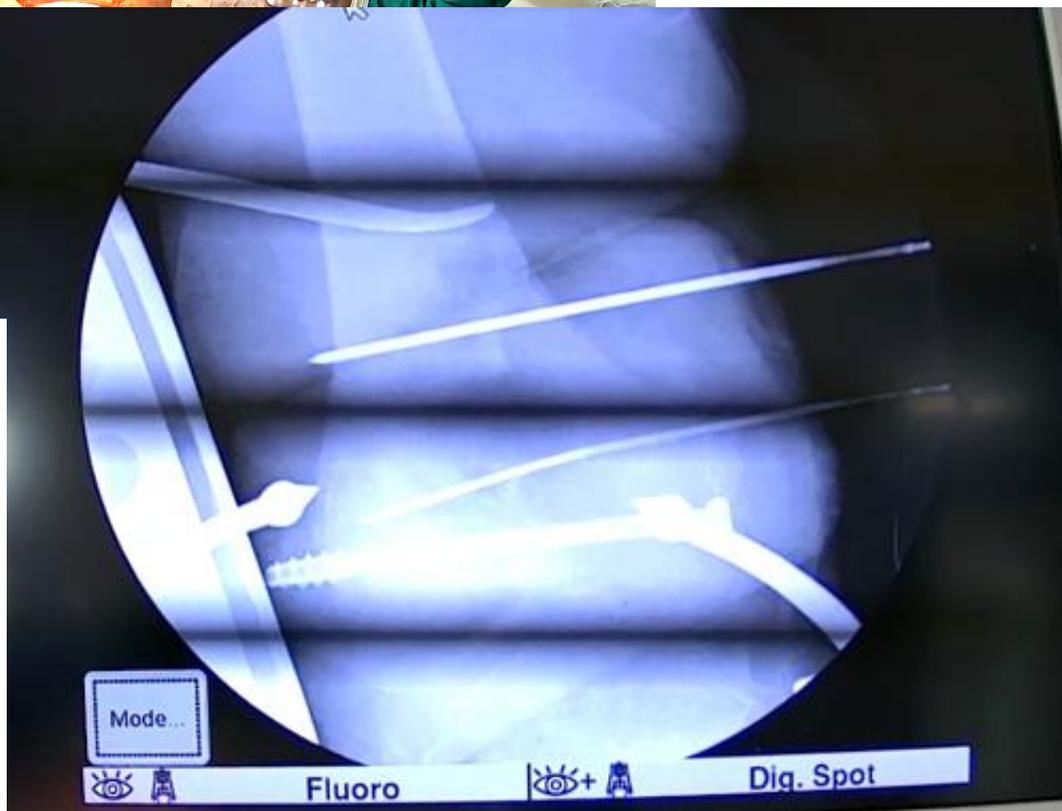
Difficoltosa visione del campo operatorio



Evoluzione con telecamere di «sicurezza» Wyze



Amazon.it
WYZE Cam v3 con vi...



LIMITI

Effetto «Moire»

Impossibile regolare le esposizioni

Impossibile eseguire zoom corretti

Non progettato per utilizzo sanitario – privacy e consensi

«sicurezza» Wyze

LIMITI

Effetto «Moire»

Impossibile regolare le esposizioni

Impossibile eseguire zoom corretti

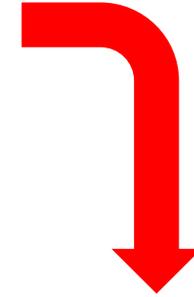
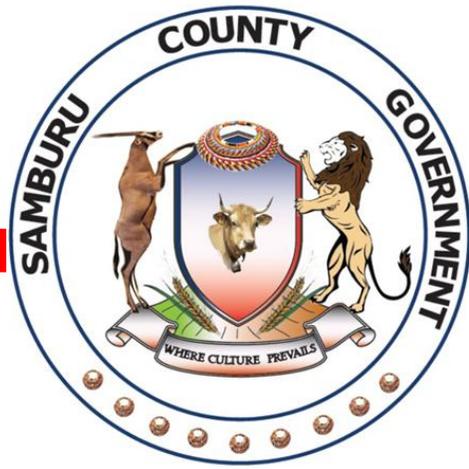
Non progettato per utilizzo sanitario – privacy e consensi



Amazon.it

WYZE Cam v3 con vi...





**TelePresence
Ecosystem for
Healthcare
Professionals**

Remote Collaboration

Anywhere, Any Time.

It's like you're **Always There!**

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PEOPLE & PROGRAM

**Bridging Healthcare Gaps
Worldwide**

Our vision for the future is a world where every surgeon has equitable access to advanced surgical training, mentorship, innovative technology, wellbeing programs, and educational resources.

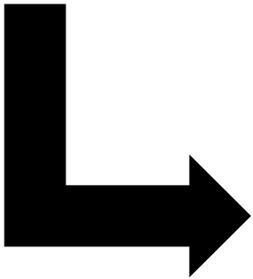


SMART glasses





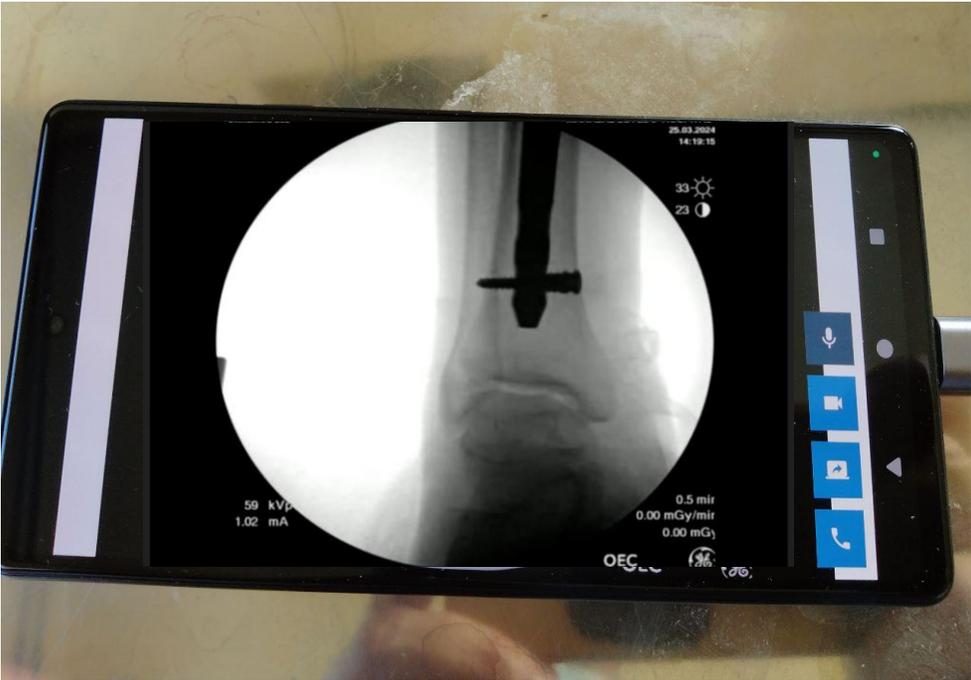
SCREEN View



BNC CABLE



BNC-HDMI CONVERTER



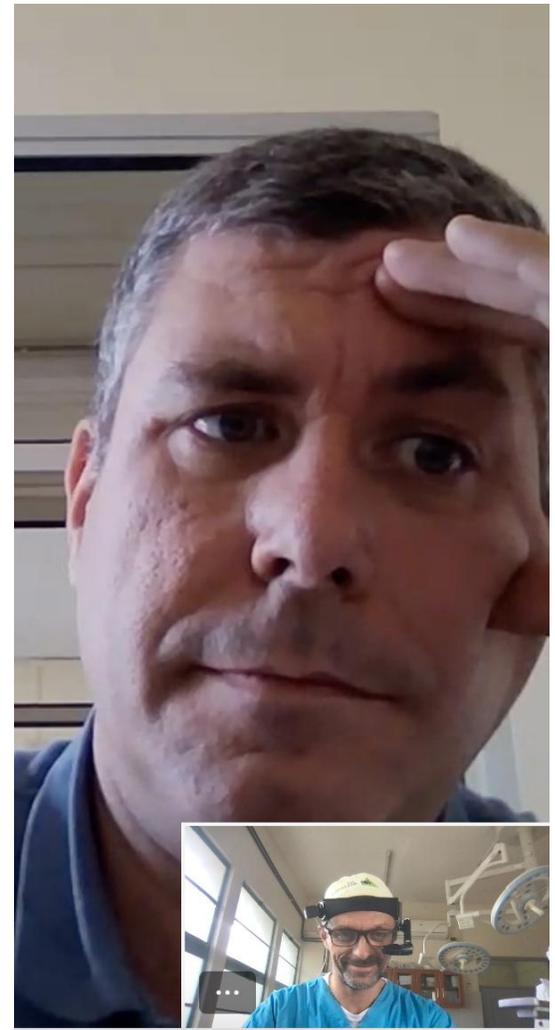
HDMI

LEARNING CURVE

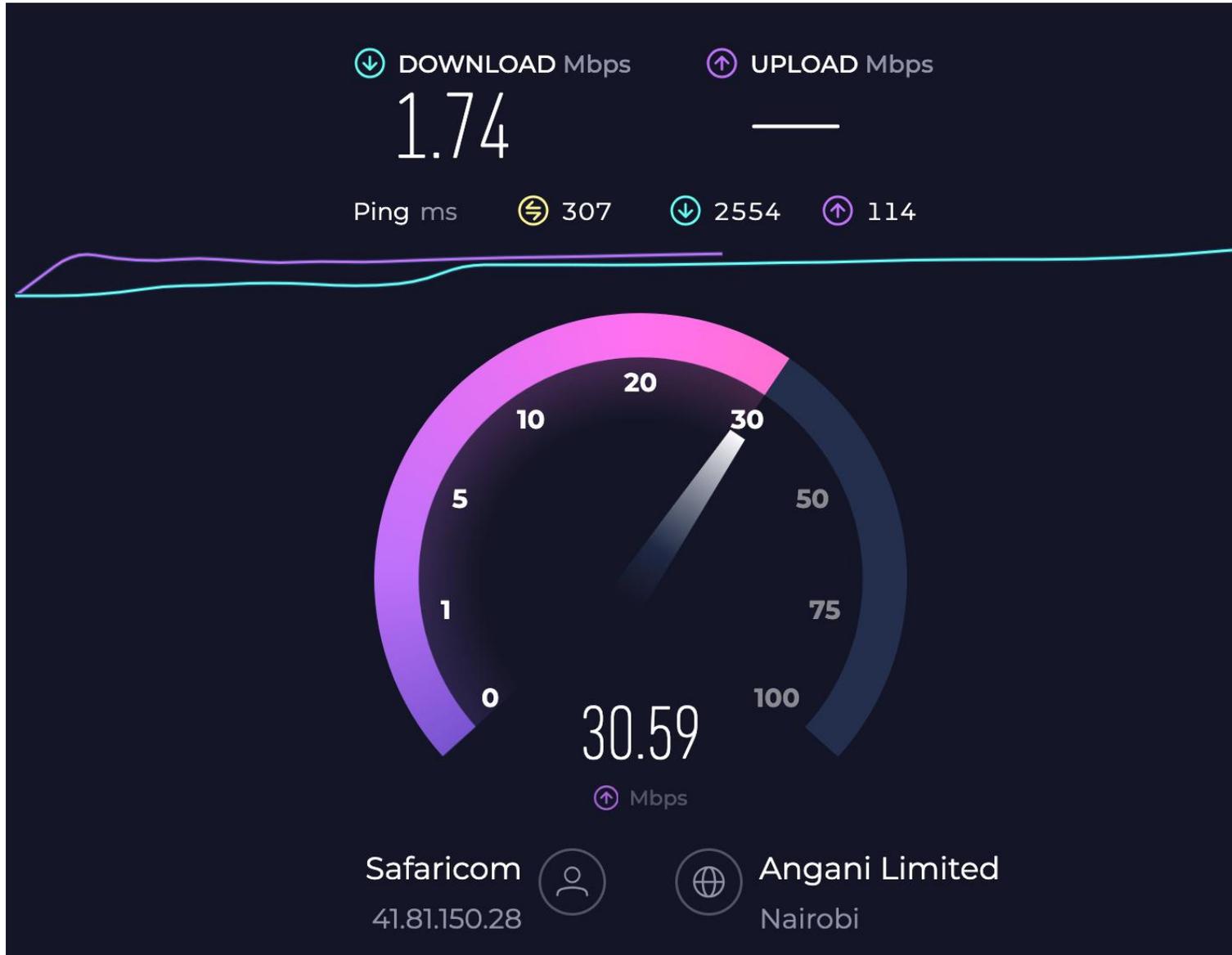
The screenshot shows a web browser window with the URL `isee.televu.net/session/`. The interface features a top navigation bar with the TeleVU logo and a menu of tools including Settings, Participants, Image Gallery, Screen Share, Chat, Add, Screenshot, Record, Draw, Video, and Mute. A yellow 'End' button is located in the top right. The main content area displays a large circular X-ray of a hand, with technical data at the bottom: `59 kVp`, `1.02 mA`, `0.5 mir`, `0.00 mGy/mir`, and `0.00 mGy`. The OEC and GE logos are visible at the bottom right of the X-ray. On the left side, there is a 'Recording' indicator and a list of participants: Farbod Abolhassani, Dr. Daniele Sciuto Glass, and Sciuto - ScreenVU. A vertical toolbar on the right side of the X-ray includes controls for Mute, Pause, Zoom, Brightness, Focus, Volume, Resolution, Flashlight, Scan, and Reconnect.

This block contains three video thumbnails from a meeting. The top thumbnail shows a man with dark hair, identified as 'Farbod Abolhassani'. The middle thumbnail shows a man with grey hair, identified as 'Luigi (non verificato)'. The bottom thumbnail shows a man wearing a yellow hard hat and safety glasses, in a clinical or laboratory setting.

OMG!!



VELOCITA' DI CONNESSIONE INTERNET



Dr. Luigi Paolo Spreafico

Dr. Daniele Sciuto



Microphone, Video, and Full Screen icons for each participant.

Dr. Daniele Sciuto



Settings, Mute, Pause, Zoom, Brightness, Focus, Volume, Resolution, Flashlight, Live Chat

VISUALE DEL CHIRURGO



VISUALE DEL MENTORE

isee.televu.net/session/

TELEVU™
Always There!

Settings Participants Image Gallery Screen Share Chat Add Screenshot Record Draw Video Mute **End**

Dr. Spearfico

Dr.Sciuto - Smart Glasses

OR Fluoroscopy

08.04.2024 16:47:31

31
24

66 kVp
1.37 mA

0.6 mAs
0.00 mGy/mAs
0.00 mGy

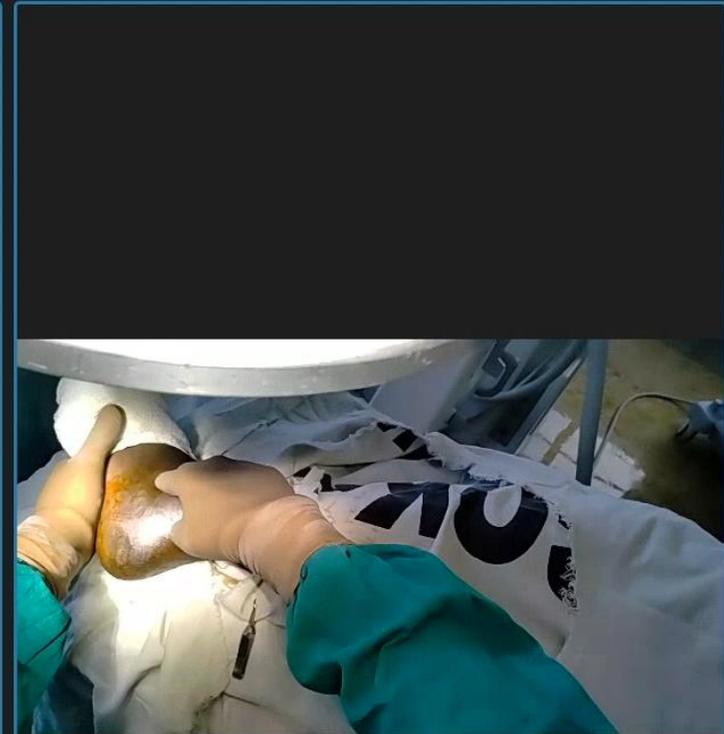
OEC

Mute
Pause
Pan / Tilt
Zoom
Brightness
Focus
Volume
Resolution
Flashlight
Scan
Reconnect

Use Chat

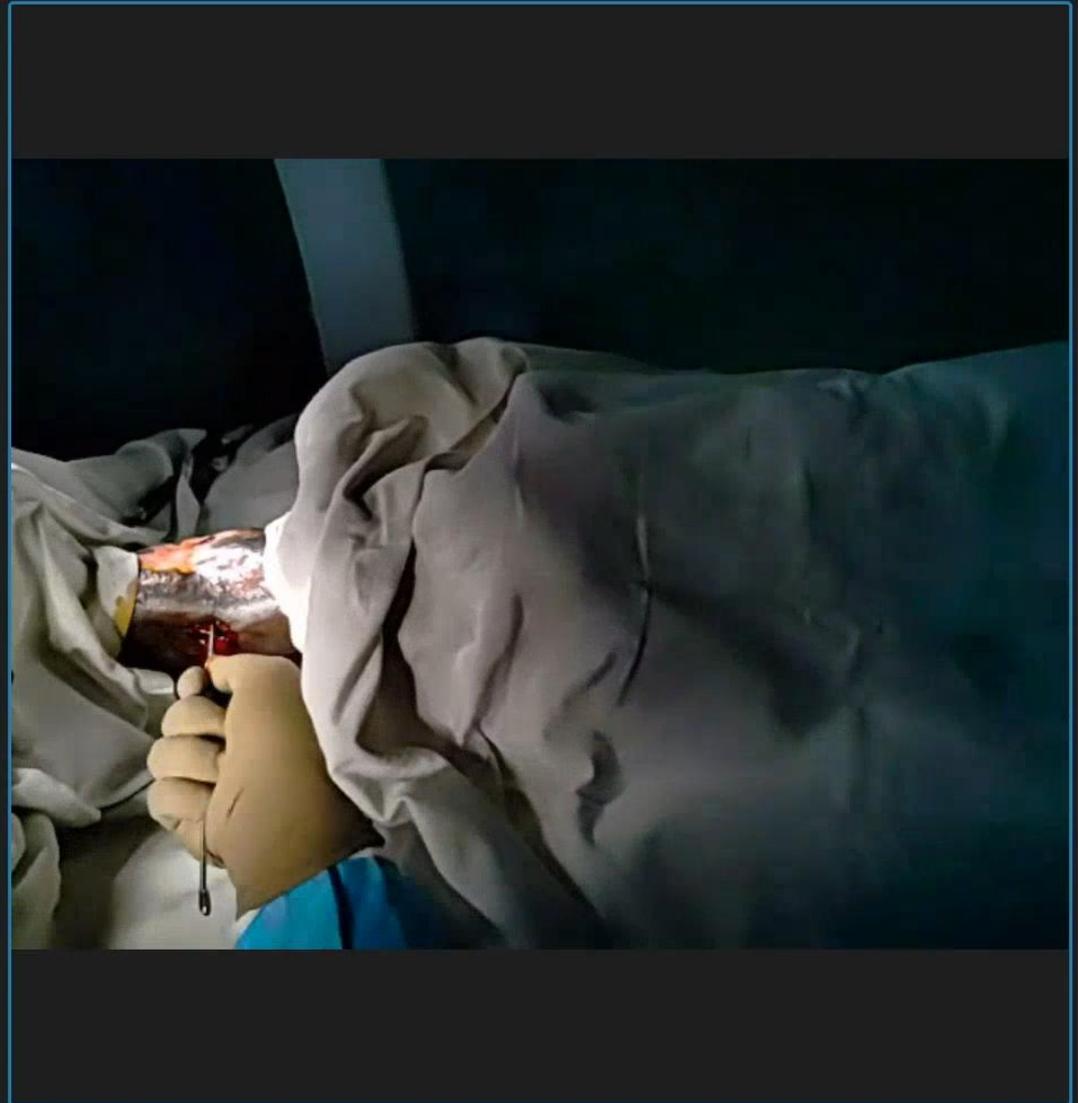
PRIMO UTILIZZO - FRATTURA DI CALCAGNO

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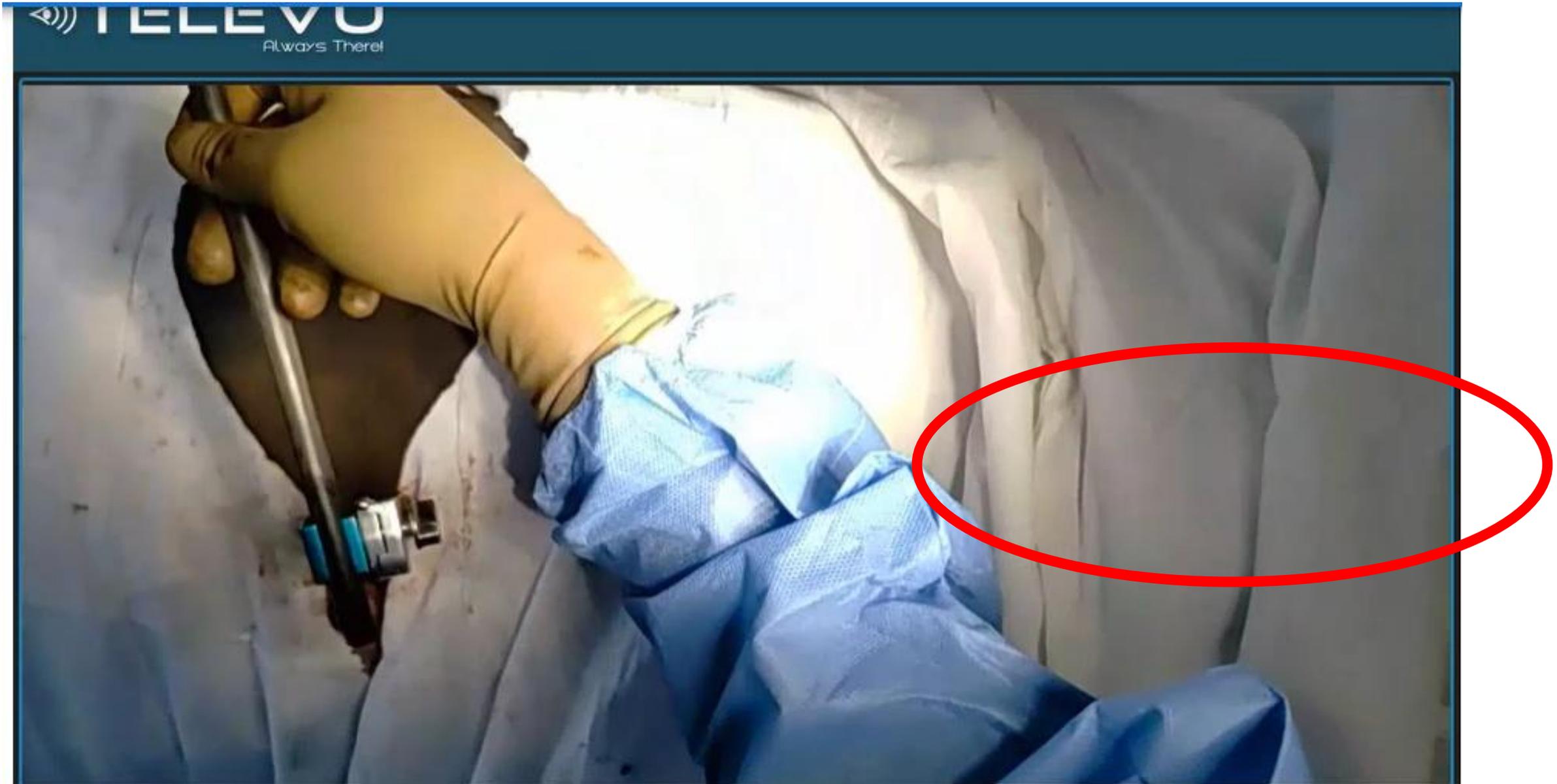


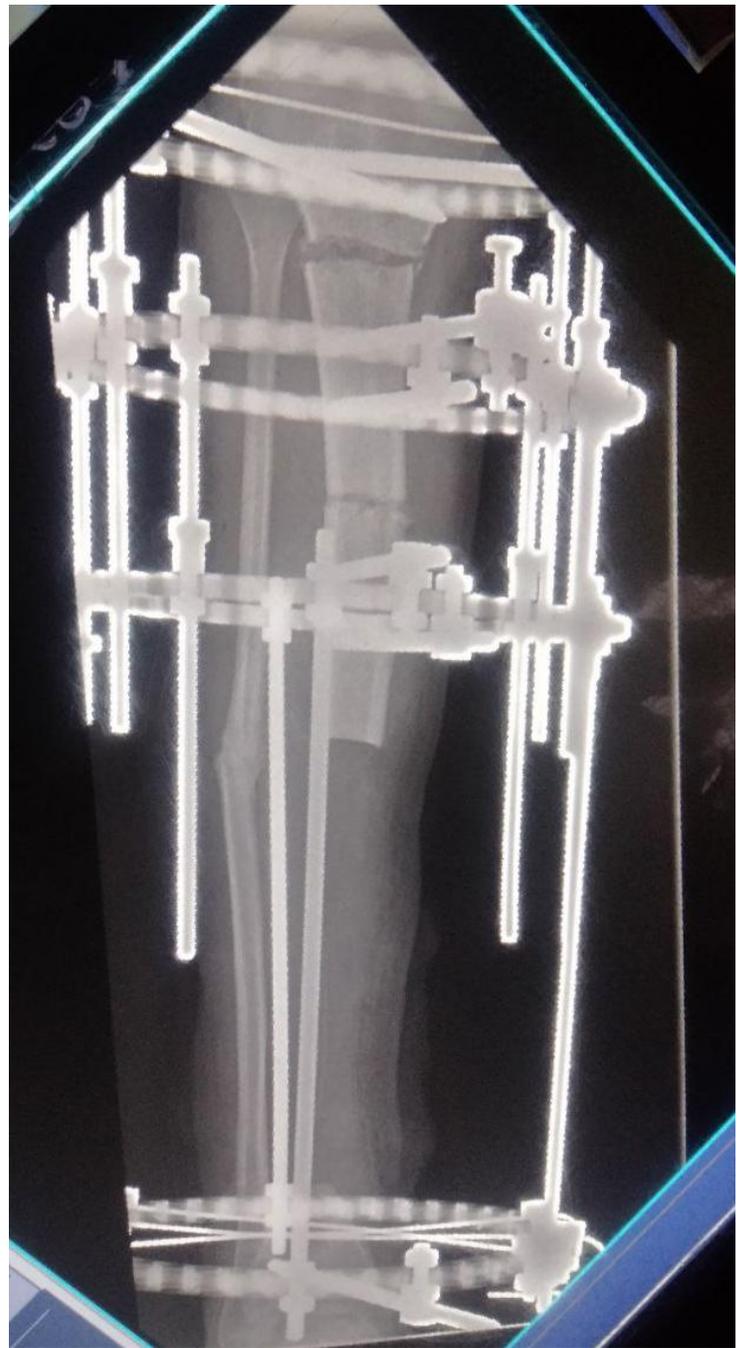
PSA IPERTROFICA

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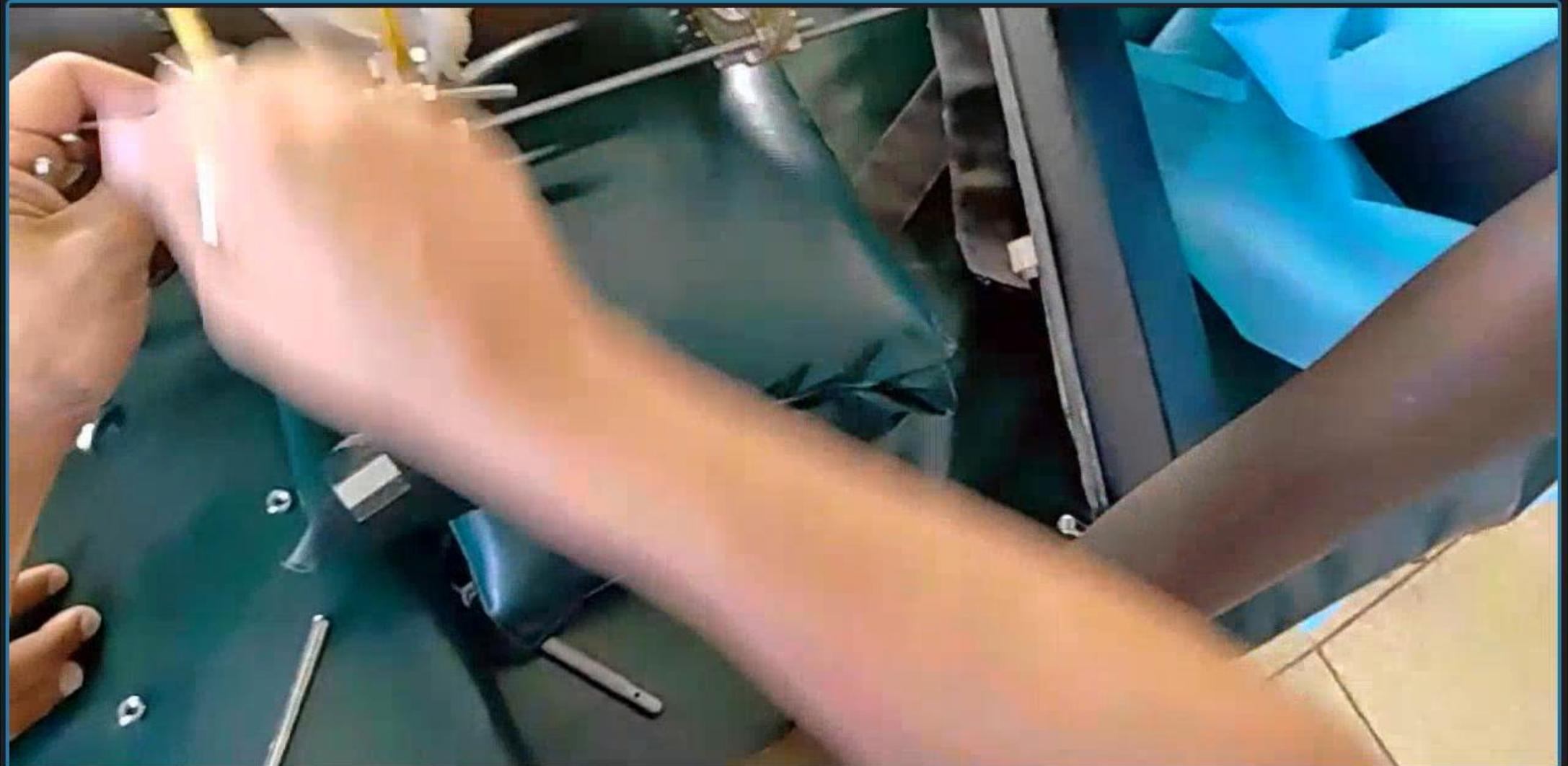


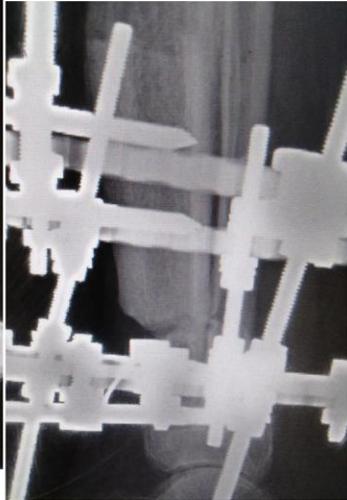
PZ PUERPERA, FX BACINO - OPEN BOOK

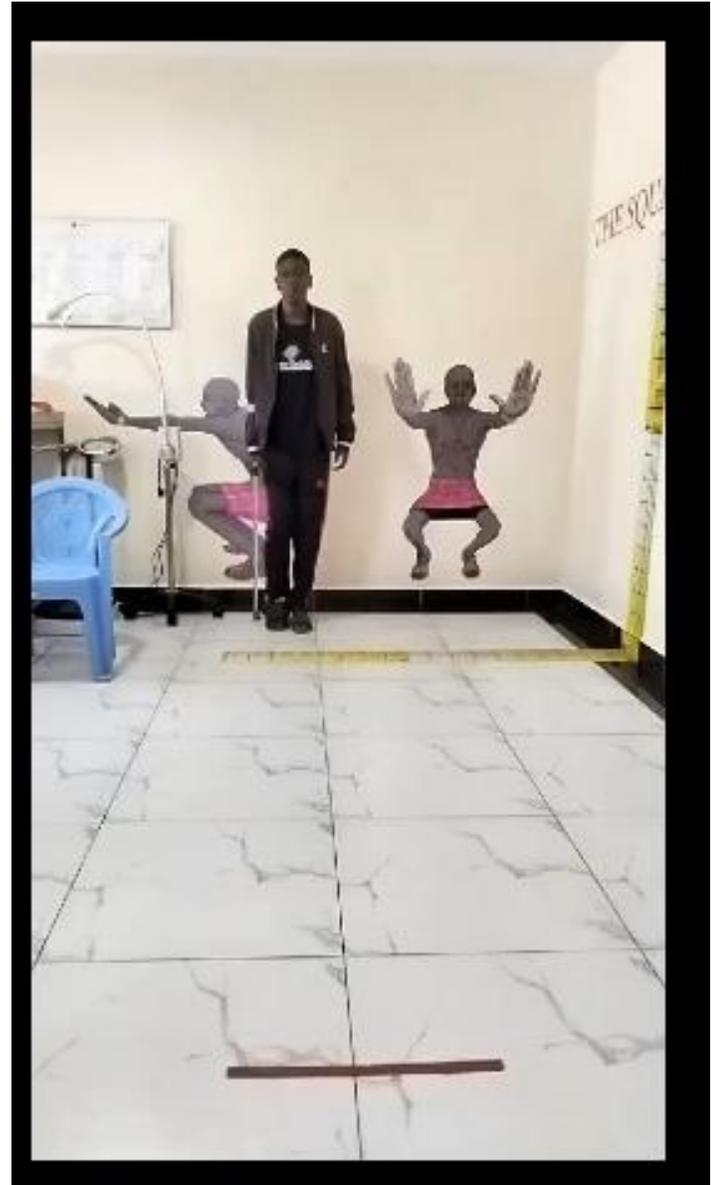
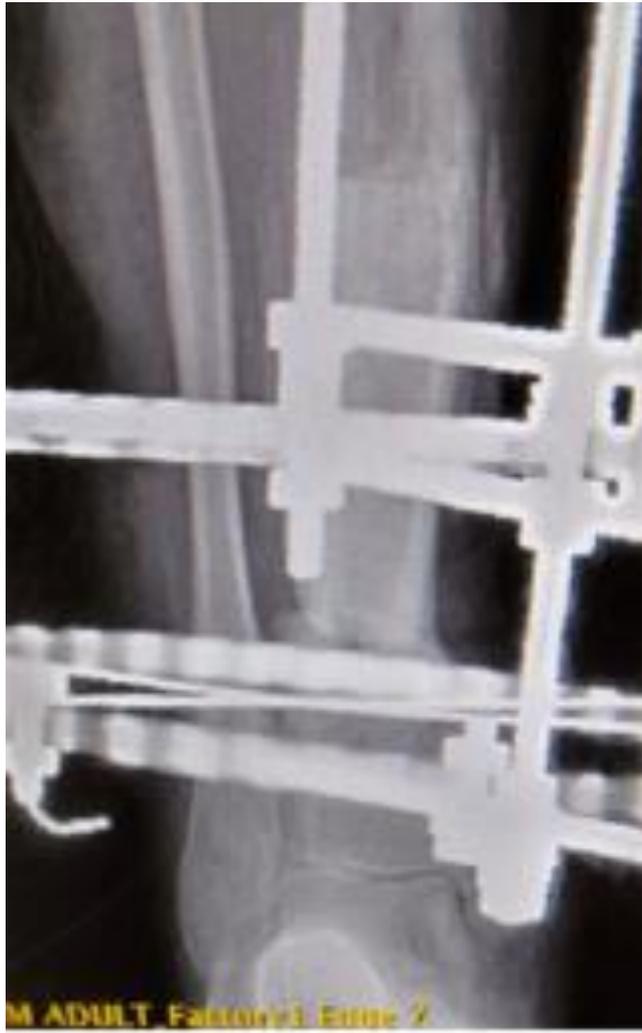




CORREZIONE DEL DOCKING SITE





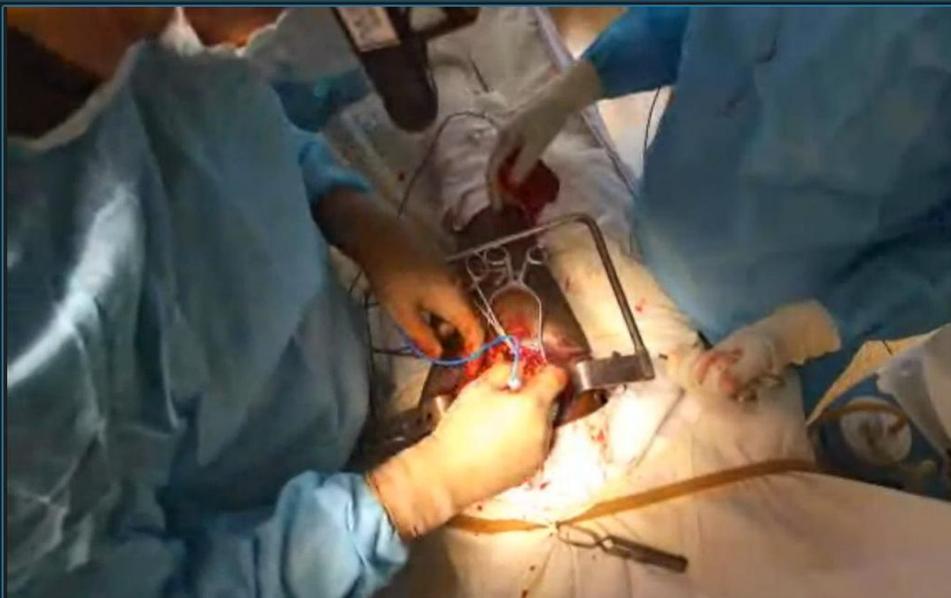




TELEVU™
Always There!

00:00:02

TELEVU™
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00:00:05

01:37:58



00:00:06

01:13:21

30 PROCEDURE

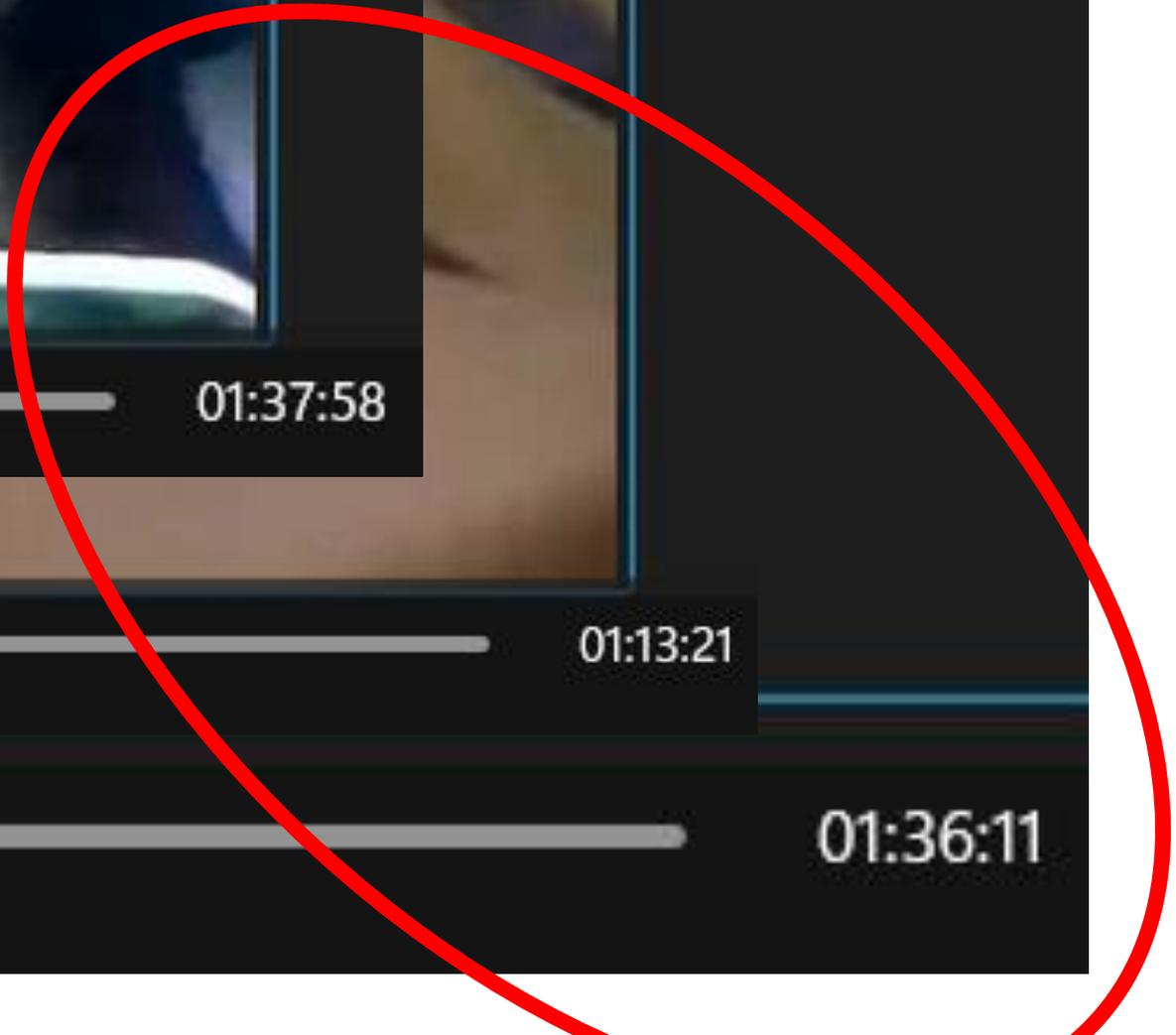


01:37:58



01:13:21

01:36:11



LIMITI

- Velocità di internet – malfunzionamento dell'hardware
- Fattori umani – **fiducia** del Chirurgo in loco
- **Disponibilità e conoscenza della problematiche in loco**
da parte del Mentore

TAKE HOME MESSAGES

- Gli Smart Glasses sono un formidabile strumento per chirurgia con live mentoring
- E' fondamentale la disponibilità di decenti connessioni internet
- Necessita una curva di apprendimento e uso costante
- Il potenziale è enorme

