

Endoscopía Lumbar “Minimun is Maximun”

Dr José Fleiderman V.

POR QUÉ ENDOSCOPIA?

Ventajas

- Ambulatorio (Costos).
- Sedación y Anestesia Local/Rápido recambio.
- Clara visualización/Escaso sangrado.
- No requiere neuromonitoreo/
Disminución del riesgo neurológico.
- Menor Daño tisular/Fibrosis.
- Mínimo dolor incisional.
- Cosmético.
- Otros: Recuperación, infección, lesión dural, cirugía de revisión.

Desventajas

- Curva de aprendizaje.
- Inversión inicial en infraestructura.
- Equipo de trabajo.
- Reparación de rotura dural??

RACK DE ENDOSCOPIA

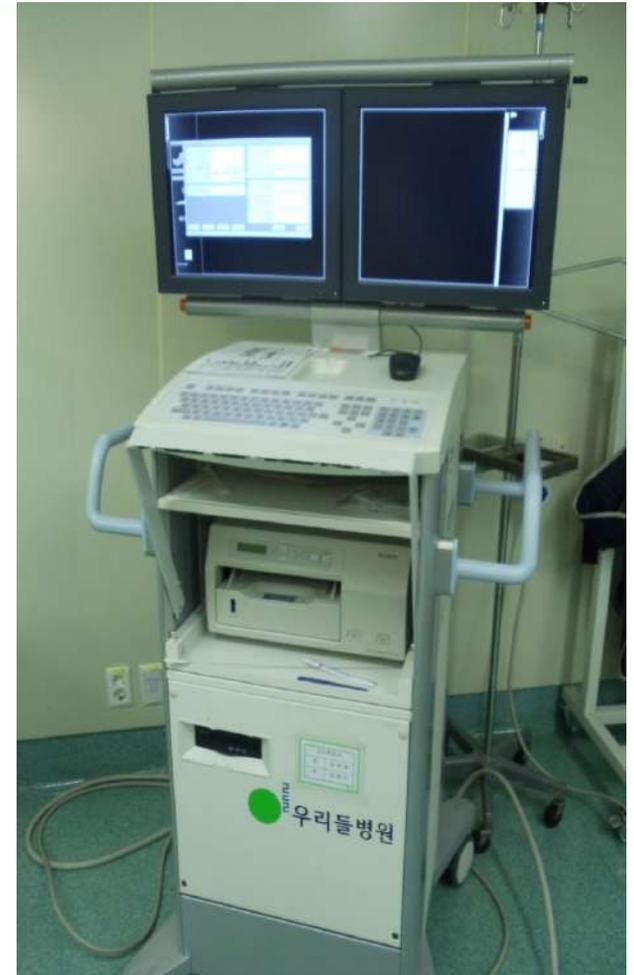
Armado de acuerdo a preferencia Individual

- Monitor
- Cámara y procesador de imagen
- Bomba de irrigación: 20-40mm de Hg (80), no superar la PaD, Flujo al 100%
- Fuente de luz
- Grabador de video
- Motor endoscópico: 80.000 rev/min

Suero: NaCl al 0.9% con 80mg de gentamicina por Bolsa (Tº ambiente)



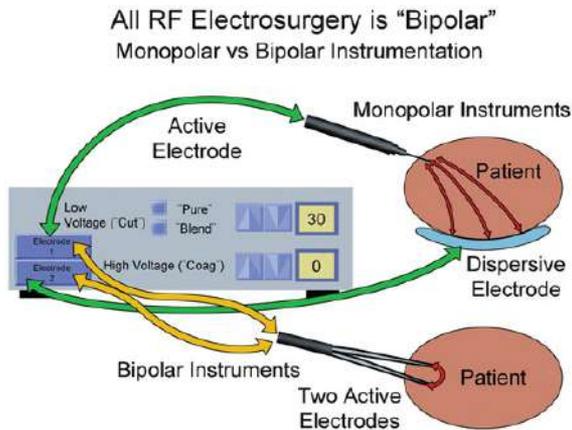
ARCO EN C



RADIOFRECUENCIA (TRIGER FLEX)

Bipolar Hemo: Contracción controlada de tejidos blandos y hemostasia: Anuloplastía

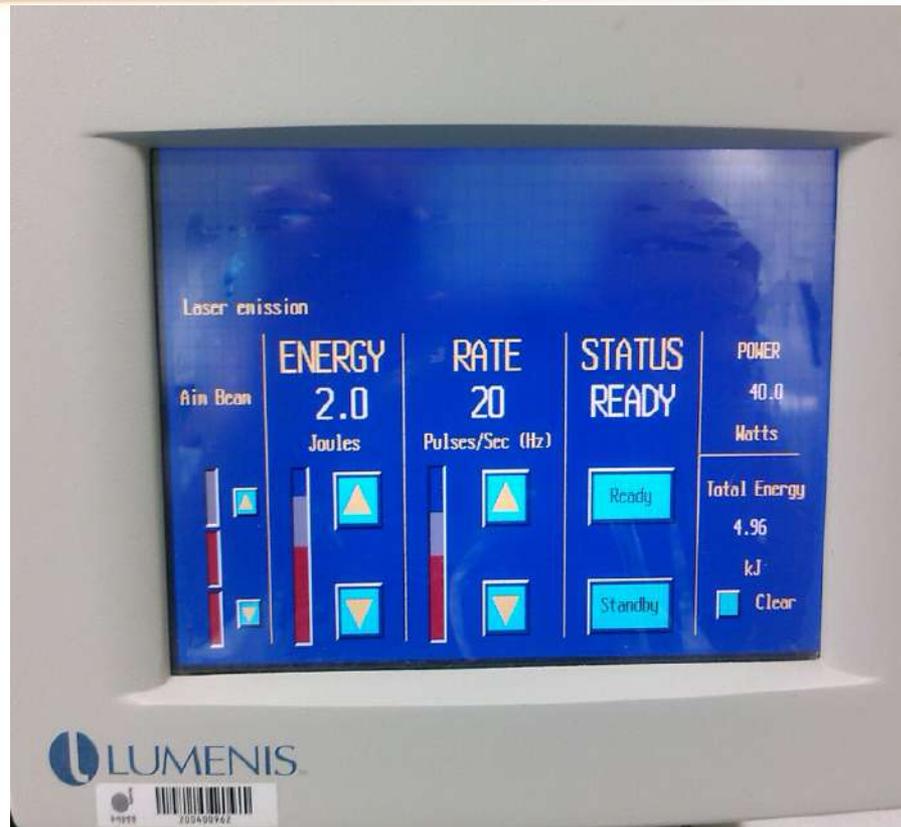
BipoTurbo: Ablación controlada de tejidos blandos. Ablación y descompresión del NP



40 Watts



LASER (LUMENIS Ho: YAG)



Ayuda en descompresión

Escencial en PECD

No sobrepasar 20KJ por nivel operado

Principios del uso de Laser en PELD

- Deben ser utilizados bajo visión endoscópica directa, visualizando toda la anatomía antes de su uso.
- Evitar uso sobre placas vertebrales: necrosis térmica.
- Distancia adecuada entre la punta del laser y el lente.
- Uso intermitente

Ventajas

- Bisturí quirúrgico pequeño“ *knife of light*”
- 90° hacia el lado con 360° de rotación otorgan facilidad de uso y de llegada al target
- Reducen el tiempo quirúrgico
- Mantienen la hemostasia
- Reducen dolor post op y movilización precoz

Complicaciones

- Neurológicas : Desde disestesias transitorias a deficit motor permanente.
- Distrofia simpatico refleja: Uso excesivo en la región del Ganglio dorsal
- Discitis Aseptica
- Osteonecrosis

Cómo utilizar Laser intraop

Non-contact

- Causa cráteres de ablación de diámetro amplio y poco profundos.

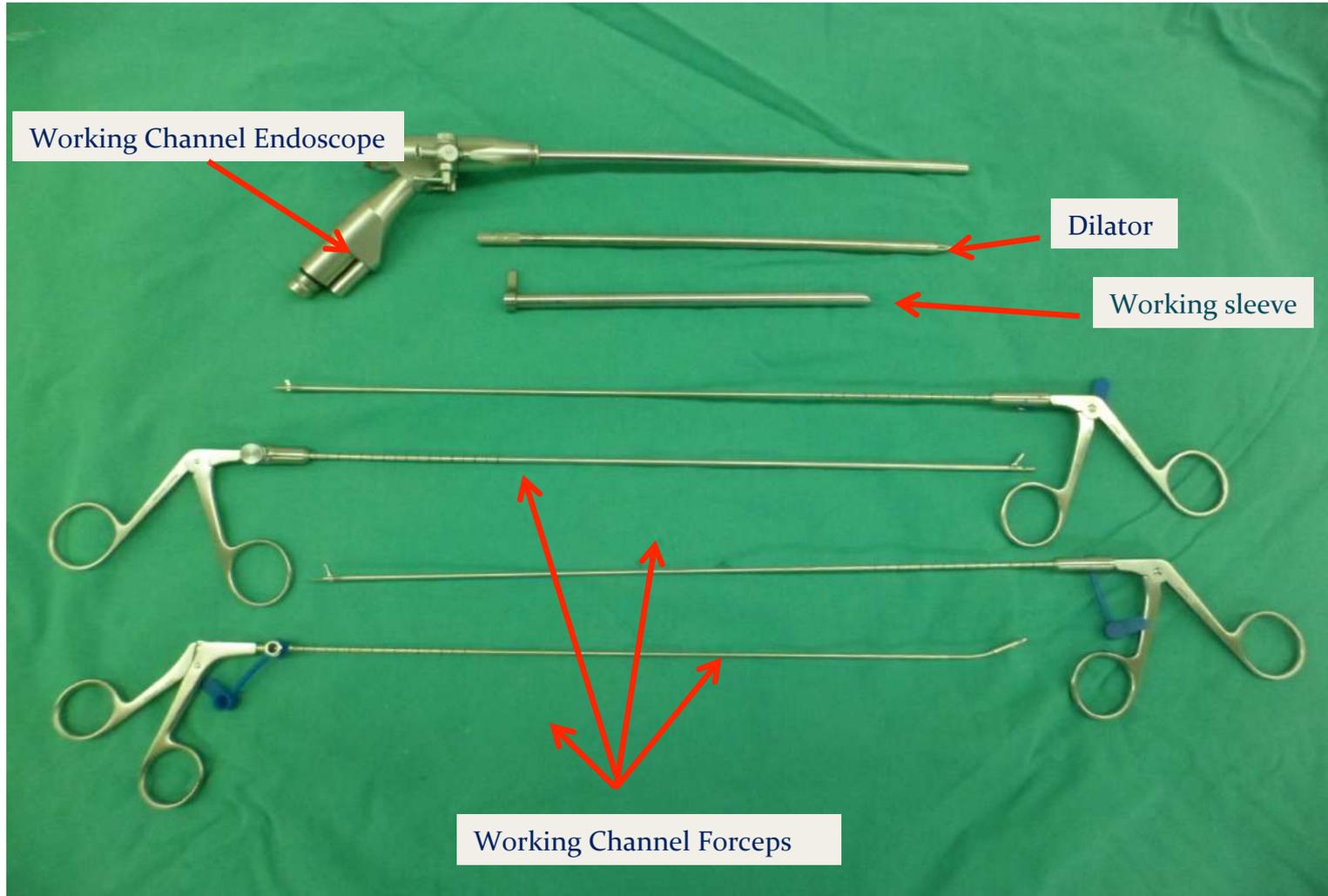


Contact

- Causa cráteres profundos de diámetro pequeño.



INSTRUMENTAL





Cánula de trabajo

ID 6.5 mm

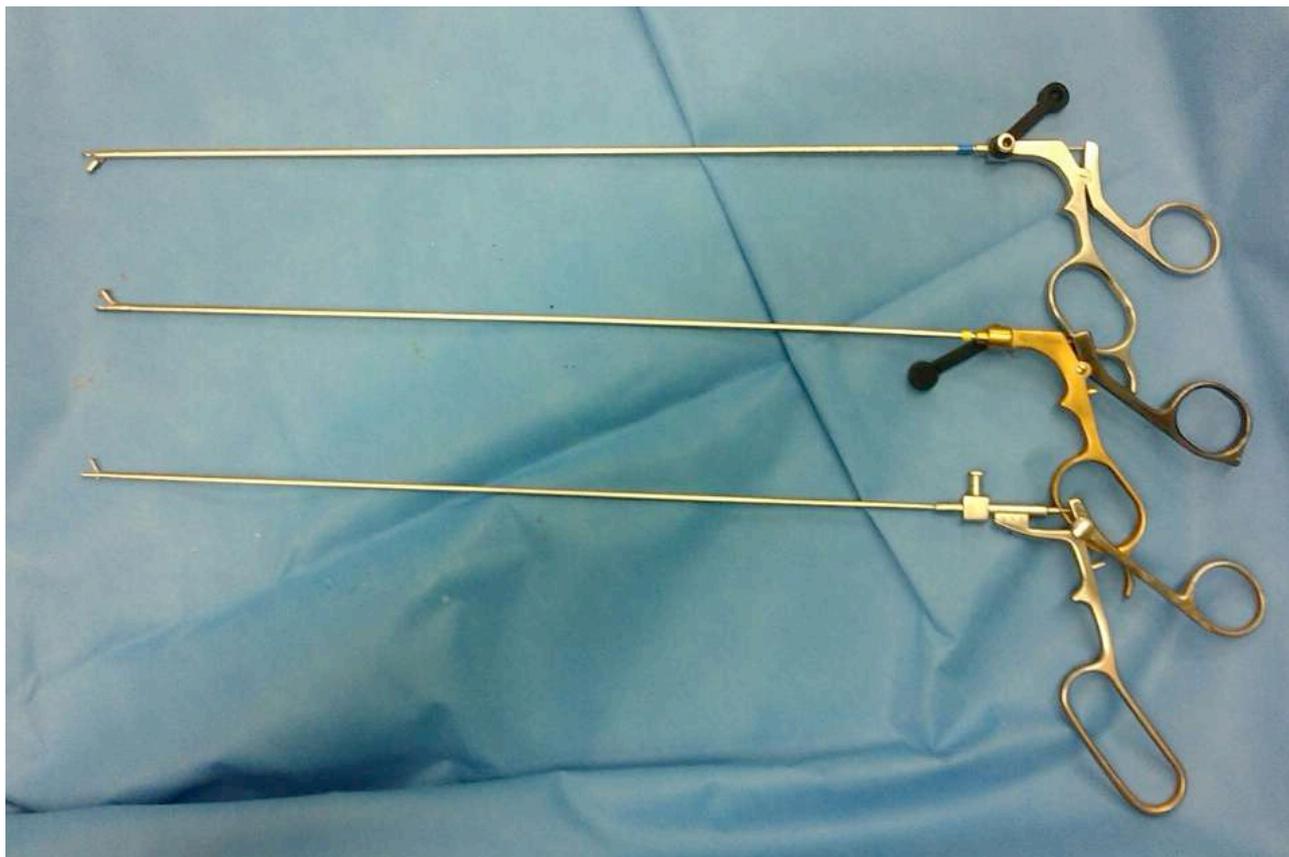
OD 7.5 mm

Largo 170 mm

Endoscopio

Largo 210/165 mm

Canal de trabajo 3.7 mm

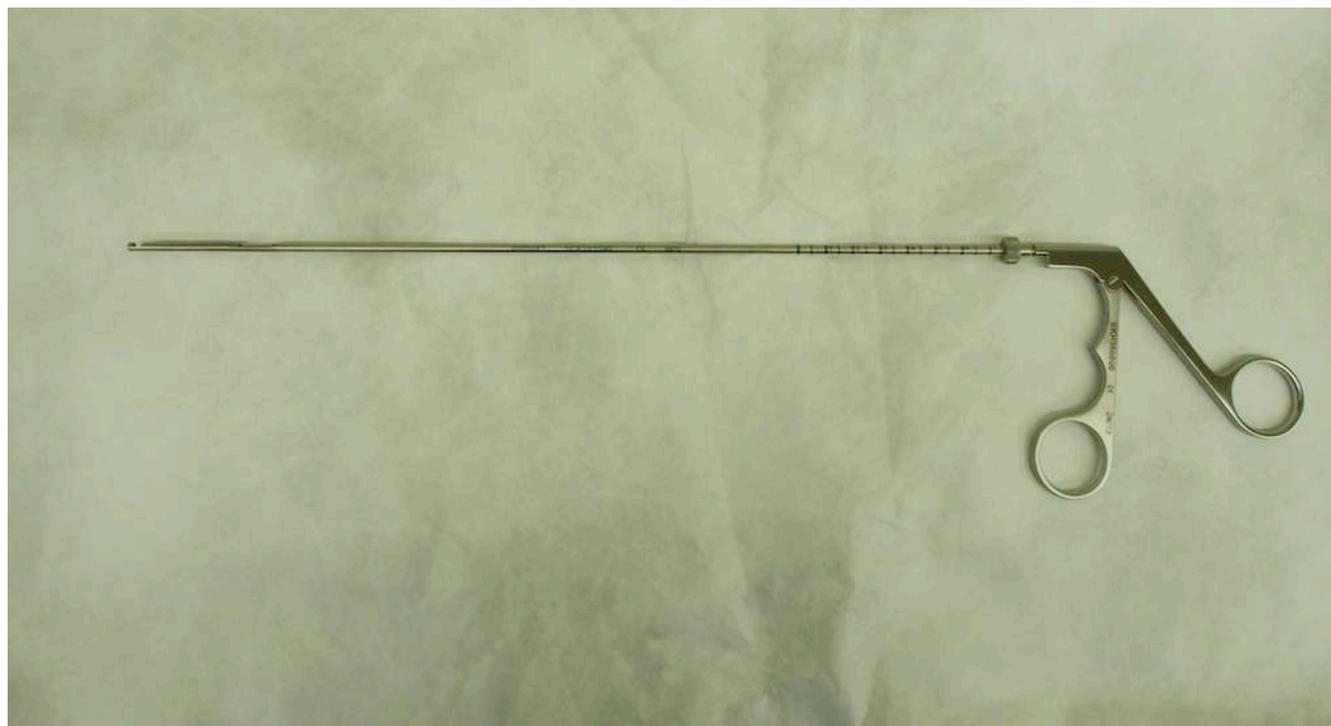


Dougan Endoscópicas

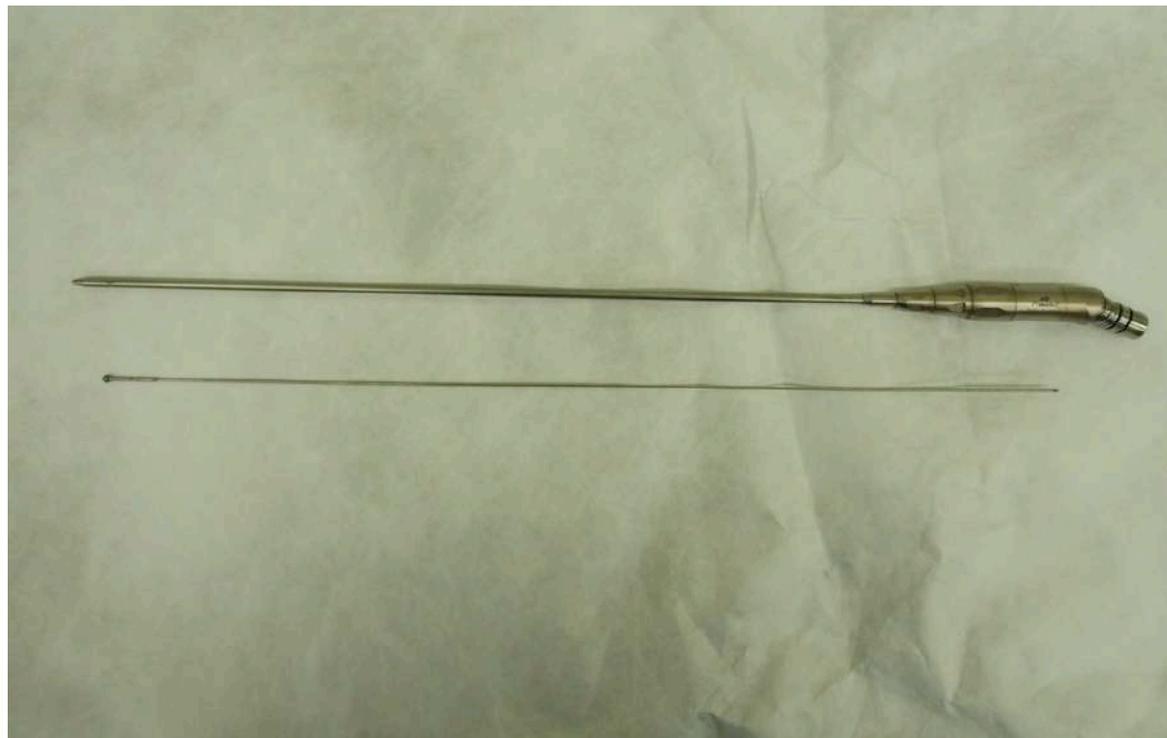
Largo 320mm
OD 3,5 mm

Kerrison 90°

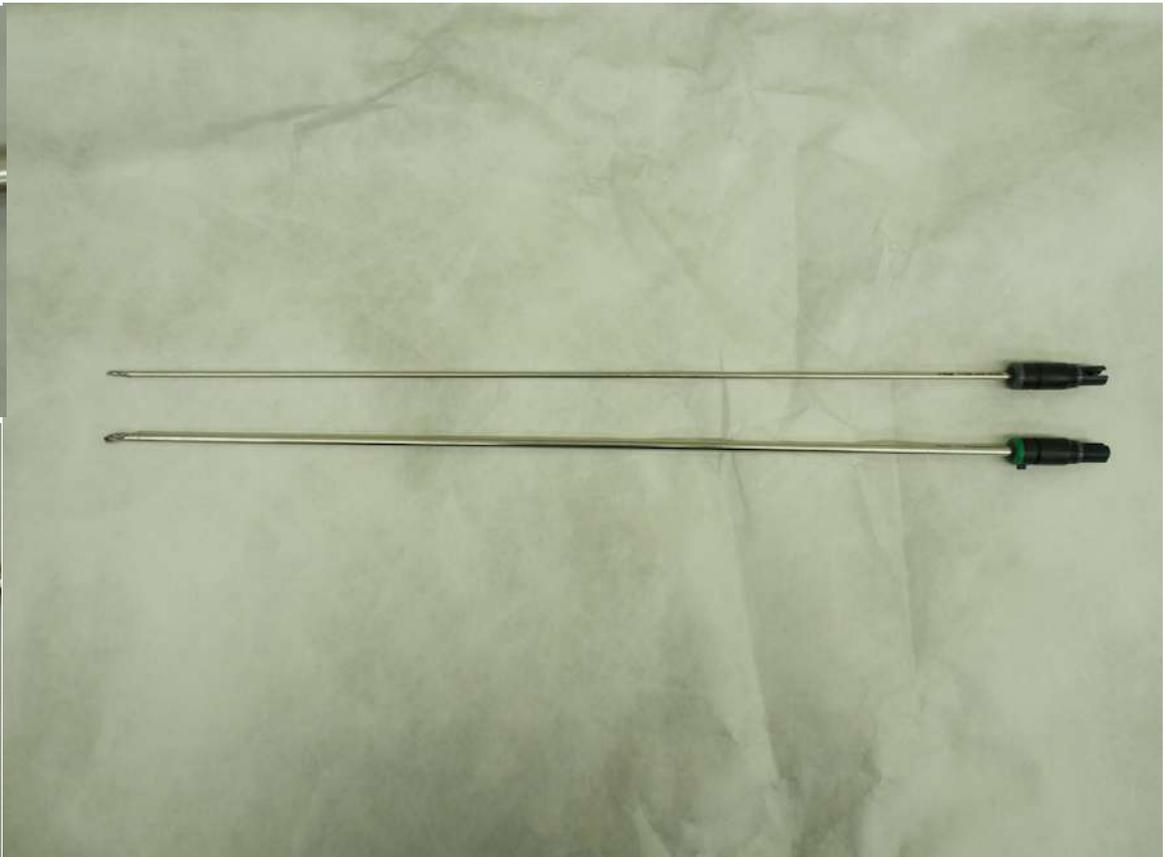
OD 3.5 mm
Length 320mm

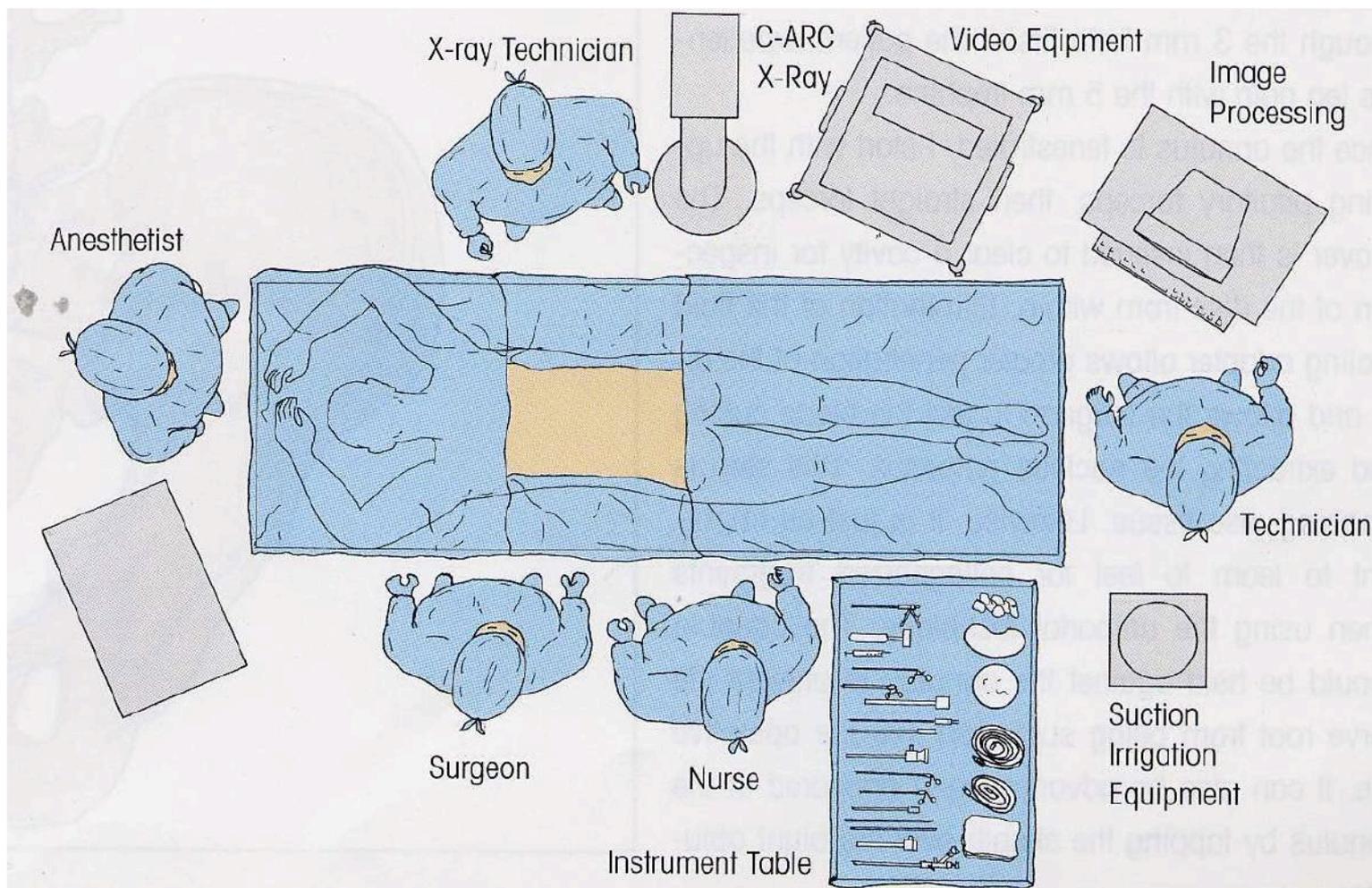


Fresas (diamond tip)



Shaver







POSICIONAMIENTO



TRANSFORAMINAL



TRANSFORAMINAL



INTERLAMINAR

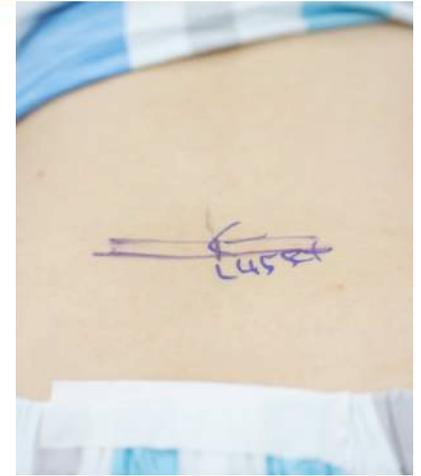


INTERLAMINAR



INTERLAMINAR

MARCACION DEL NIVEL





- **Salvar imágenes AP/LAT**



- **Todas las inclinaciones, movimientos necesarios para ir de AP a LAT se marcan con telas adhesivas en el Arco en C antes de poner los campos: Menor tiempo Qx y Radiación**

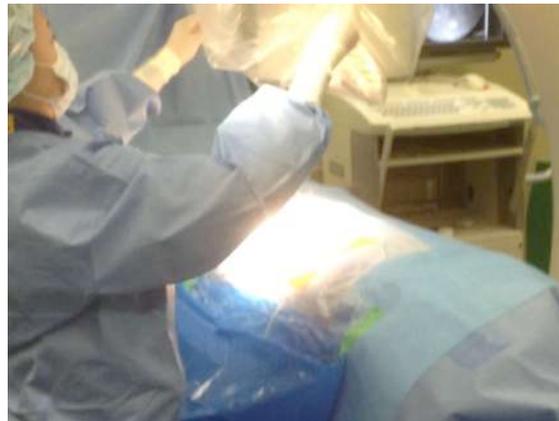


PREPARACION DE PIEL





CAMPO QUIRURGICO





TECNICA QUIRURGICA



#JERINGA 10ML CON LIDOCAÍNA 1%(PIEL)

JERINGA 10 ML CON LIDOCAÍNA 1% CON AGUJA 22G (PLANO MUSCULAR)

JERINGA 5ML CON LIDOCAÍNA 1% CON AGUJA 18G (ESPACIO PERIDURAL)

JERINGA 5ML CON 2ML CONTRASTE+ 1ML ÍNDIGOCARMIN+ 2 ML SF 0,9%(DISCOGRAFIA)





Introducción de aguja N°18

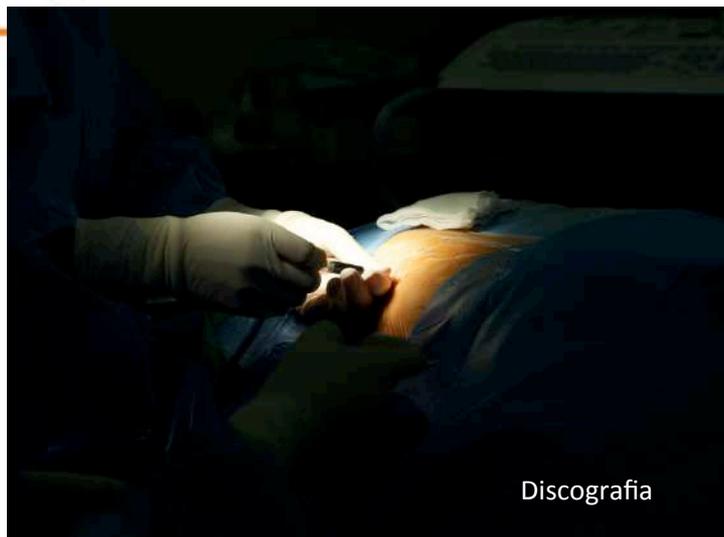


Infiltración peridural



Posición final da aguja





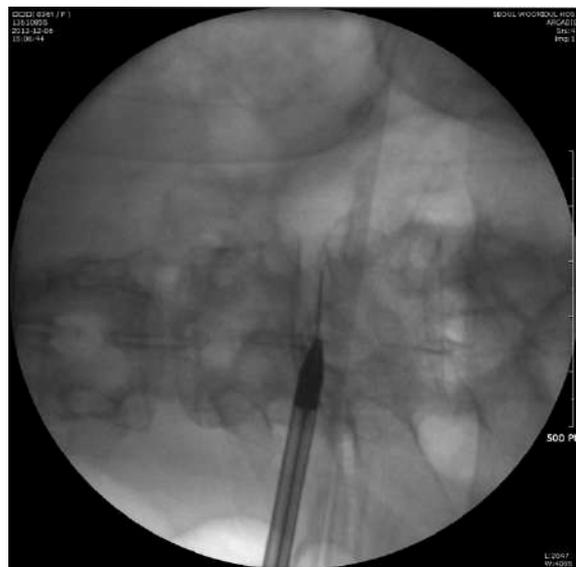
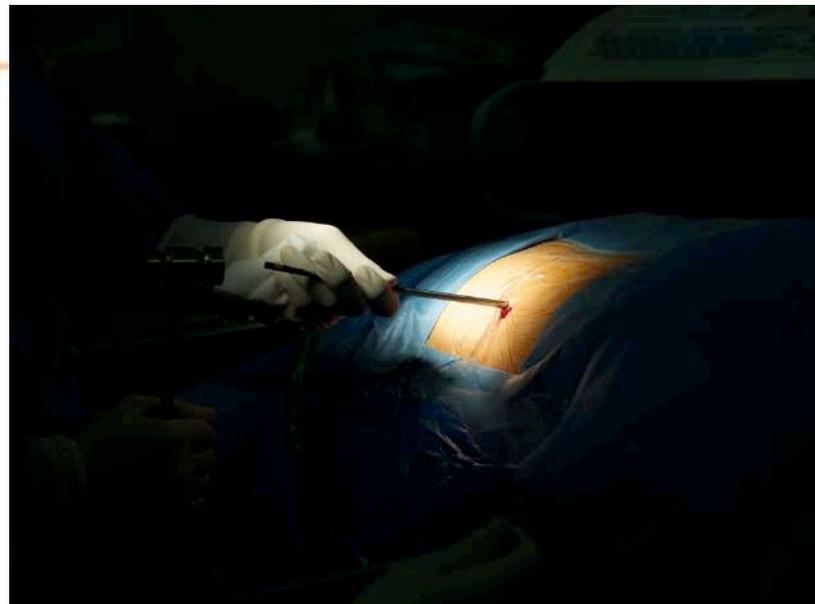
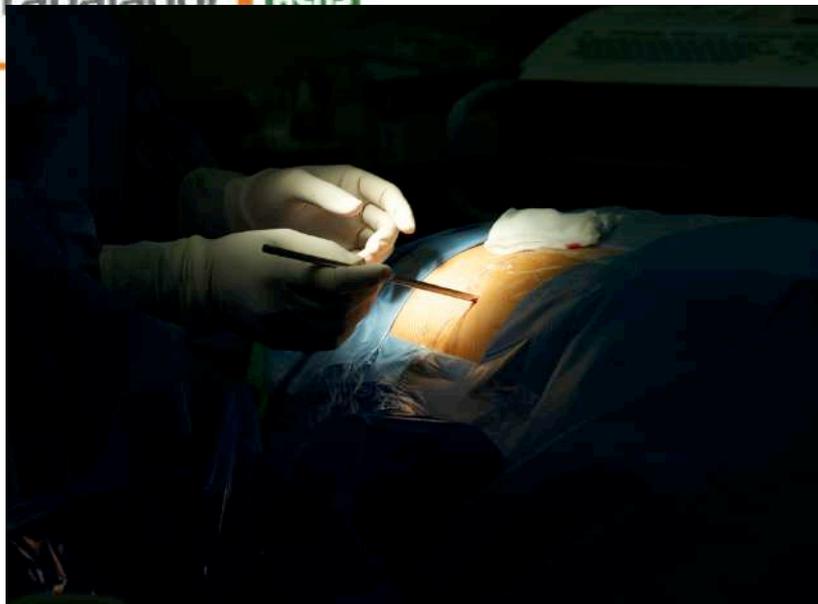
Discografía



Introducción de cable guía



Incisión de piel









29/10/13















ENTRENAMIENTO



Abril 2011





Multiple Subpial Transection (MST) - 10-year outcome

KING'S COLLEGE HOSPITAL

Cyrus Sakic, Ramesh Chaturvedi, Andrew Valentin, Giuseppe Marcon, Itan Malik, Nandini Munshi, Robert E...

Background

Landau-Kieffer Syndrome (LKS) characterized by speech regression in children that classically presents in mid first decade of life.

Key features

- language regression precedes onset of seizure activity (multiple types)
- severity of behavioural disturbance commensurate with language difficulties and seizures
- severe activity declines by mid-teen but accompanied period of social integration, employment prospects and quality of life

Multiple Subpial Transection (MST)

candidate for seizure arising from eloquent cortex

Key features

- seizures regressible but the spread of epileptiform discharges are intractably controlled, while fibres subserving function of the cortex are vertically transected
- MST creates a local disconnection of the epileptogenic focus to prevent spreading of discharges, while preserving cortical functioning



Results: Speech and Language

Case	Language skills before surgery	Language skills after surgery
1	Age appropriate	Age appropriate
2	Age appropriate	Age appropriate
3	Age appropriate	Age appropriate
4	Age appropriate	Age appropriate
5	Age appropriate	Age appropriate
6	Age appropriate	Age appropriate
7	Age appropriate	Age appropriate
8	Age appropriate	Age appropriate
9	Age appropriate	Age appropriate
10	Age appropriate	Age appropriate
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12	Age appropriate	Age appropriate
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14	Age appropriate	Age appropriate
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43	Age appropriate	Age appropriate
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45	Age appropriate	Age appropriate
46	Age appropriate	Age appropriate
47	Age appropriate	Age appropriate
48	Age appropriate	Age appropriate
49	Age appropriate	Age appropriate
50	Age appropriate	Age appropriate

Results: Behaviour and Social

Case	Behaviour before surgery	Behaviour after surgery	Social life
1	Age appropriate	Age appropriate	Age appropriate
2	Age appropriate	Age appropriate	Age appropriate
3	Age appropriate	Age appropriate	Age appropriate
4	Age appropriate	Age appropriate	Age appropriate
5	Age appropriate	Age appropriate	Age appropriate
6	Age appropriate	Age appropriate	Age appropriate
7	Age appropriate	Age appropriate	Age appropriate
8	Age appropriate	Age appropriate	Age appropriate
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43	Age appropriate	Age appropriate	Age appropriate
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47	Age appropriate	Age appropriate	Age appropriate
48	Age appropriate	Age appropriate	Age appropriate
49	Age appropriate	Age appropriate	Age appropriate
50	Age appropriate	Age appropriate	Age appropriate

Results: Seizure control

Case	Seizures before surgery	Seizures after surgery
1	Age appropriate	Age appropriate
2	Age appropriate	Age appropriate
3	Age appropriate	Age appropriate
4	Age appropriate	Age appropriate
5	Age appropriate	Age appropriate
6	Age appropriate	Age appropriate
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8	Age appropriate	Age appropriate
9	Age appropriate	Age appropriate
10	Age appropriate	Age appropriate
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43	Age appropriate	Age appropriate
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45	Age appropriate	Age appropriate
46	Age appropriate	Age appropriate
47	Age appropriate	Age appropriate
48	Age appropriate	Age appropriate
49	Age appropriate	Age appropriate
50	Age appropriate	Age appropriate

KING'S COLLEGE HOSPITAL

▪ Groups of Cadaver ▪



The 2nd

Didactic Course Of Endoscopic Spine Procedures

 (including cadaver workshop)

CONFERENCE ROOM





PERIOD
 July 2th(Wed) - 4th(Fri), 2014

VENUE
 Seoul Gangpo Airport World of Science Hospital
 (Seoul St. Mary's Hospital)

ORGANIZER
 Asia Minimally Invasive Spine Surgery





Group A	 Rafael Barro Silva	 Kaa Kei Leung	 José Fleiderman	 Mohammad Azeem ulhaq Siddiqui	 Ajay Krishnan
Group B	 Jun Jie Dong	 Hongkun Li	 Xiang Liao	 Gaoju Wang	 Bifa Fan
Group C	 Tarik Yazar	 Mustafa Ozdemir	 Changxi Li	 Xuesong Wang	 Jiro Hirayama
Group D	 Woo Jae Kim	 Hwang-woo Lee	 Dae Won Cho	 Chul-Woo Lee	 Moon Chan Kim





- 14 cirugías en vivo.
- 4 Estaciones de trabajo cadavéricas.
- Conferencias.





우리들병원

Wooridul Hospital
Больница Уридыль

ウリドウル病院
我立德医院

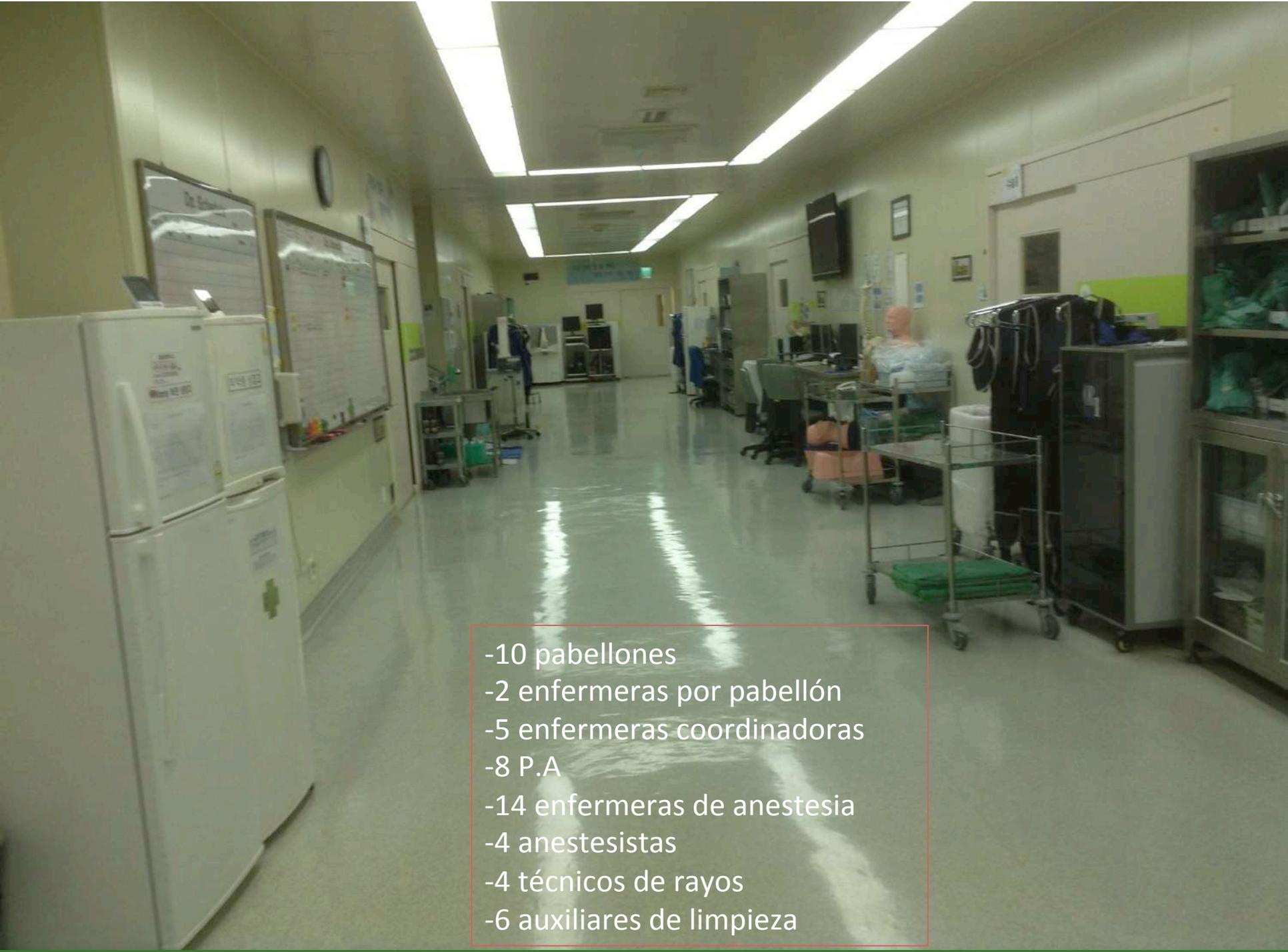
미국의료관광

JCI와 국내의료

우리들병원 즐기세요

최추·관절클리닉·안·심장·조기진단



- 
- 10 pabellones
 - 2 enfermeras por pabellón
 - 5 enfermeras coordinadoras
 - 8 P.A
 - 14 enfermeras de anestesia
 - 4 anestesistas
 - 4 técnicos de rayos
 - 6 auxiliares de limpieza

수술중



Op. Schedule

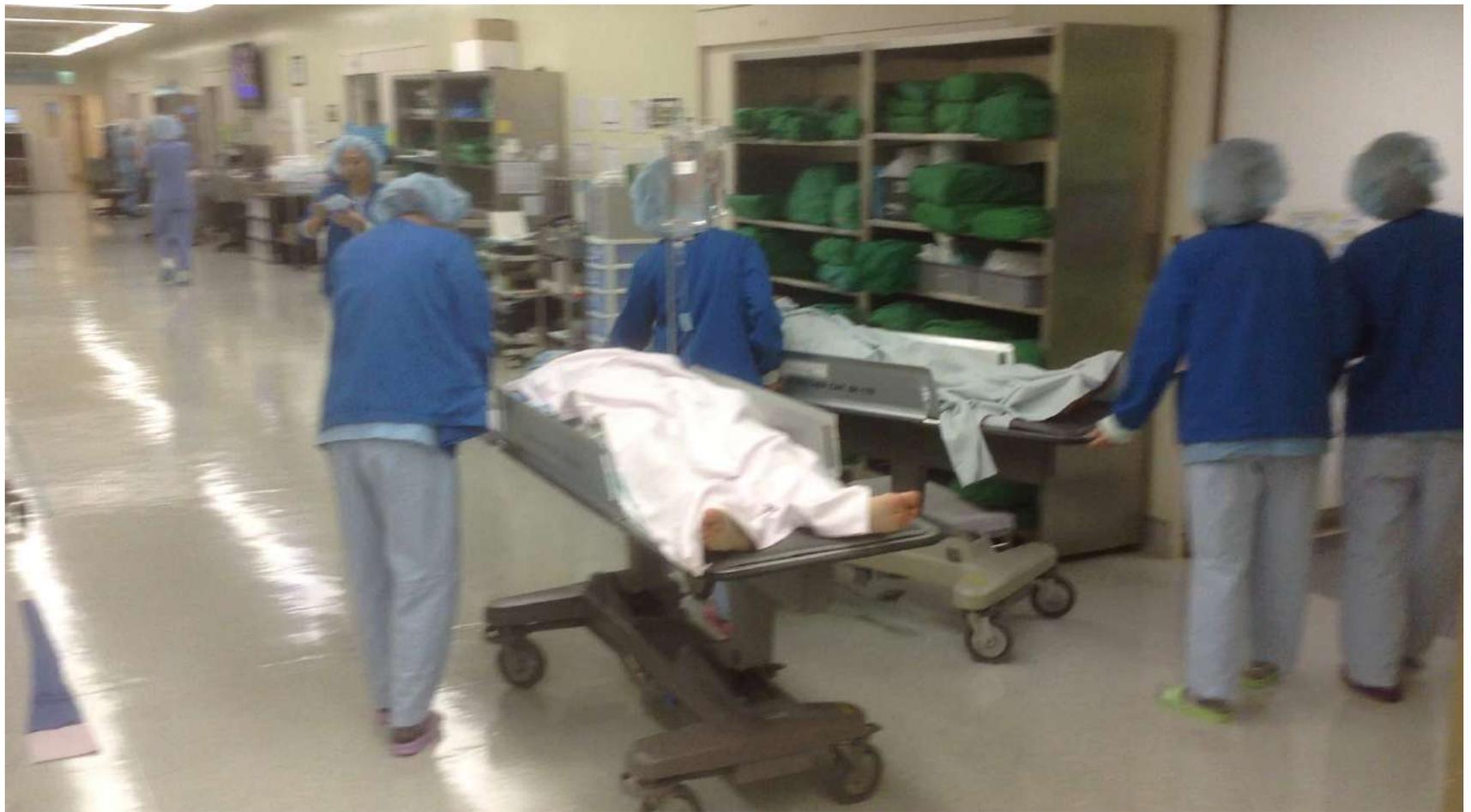
Room	Time	Dr.	Pt. Name	Sex	Age	Op. Name	Memo	Nr.
			김영준	남	55	LDL (L. S. B.)		
			김영준	남	55	LDL (L. S. B.)		
			김영준	남	55	LDL (L. S. B.)		
			김영준	남	55	LDL (L. S. B.)		
			김영준	남	55	LDL (L. S. B.)		
			김영준	남	55	LDL (L. S. B.)		
			김영준	남	55	LDL (L. S. B.)		
			김영준	남	55	LDL (L. S. B.)		
			김영준	남	55	LDL (L. S. B.)		
			김영준	남	55	LDL (L. S. B.)		

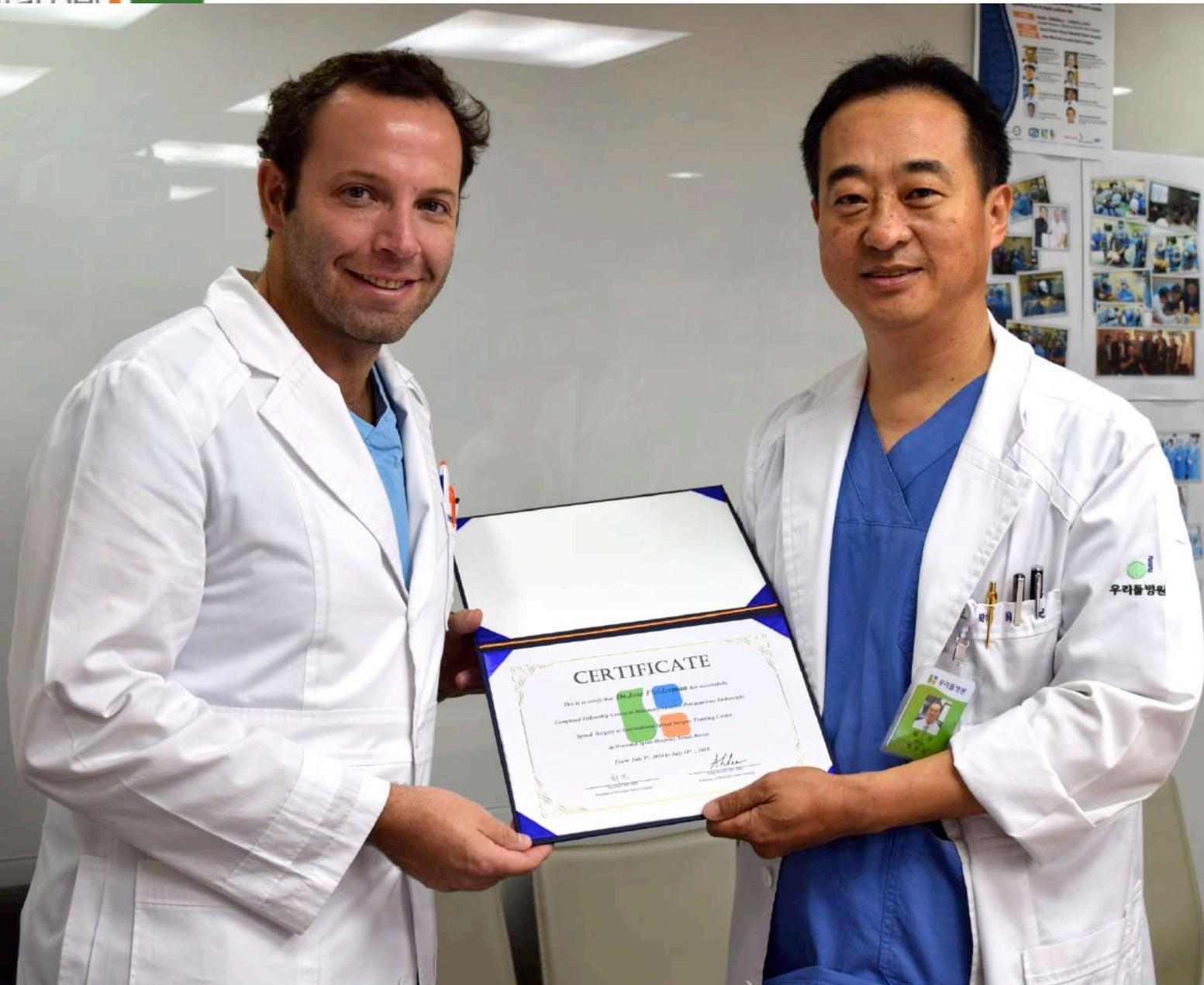
Op. Schedule

Room	Time	Dr.	Pt. Name	Sex	Age	Op. Name	Memo	Nr.
22	10:00	김영준	김영준	남	55	LDL (L. S. B.)		1
22	10:30	김영준	김영준	남	55	LDL (L. S. B.)		2
21	11:00	김영준	김영준	남	55	LDL (L. S. B.)		3
21	11:30	김영준	김영준	남	55	LDL (L. S. B.)		4
21	12:00	김영준	김영준	남	55	LDL (L. S. B.)		5
21	12:30	김영준	김영준	남	55	LDL (L. S. B.)		6
21	13:00	김영준	김영준	남	55	LDL (L. S. B.)		7
21	13:30	김영준	김영준	남	55	LDL (L. S. B.)		8
21	14:00	김영준	김영준	남	55	LDL (L. S. B.)		9
21	14:30	김영준	김영준	남	55	LDL (L. S. B.)		10
21	15:00	김영준	김영준	남	55	LDL (L. S. B.)		11
21	15:30	김영준	김영준	남	55	LDL (L. S. B.)		12
21	16:00	김영준	김영준	남	55	LDL (L. S. B.)		13
21	16:30	김영준	김영준	남	55	LDL (L. S. B.)		14
21	17:00	김영준	김영준	남	55	LDL (L. S. B.)		15
21	17:30	김영준	김영준	남	55	LDL (L. S. B.)		16
21	18:00	김영준	김영준	남	55	LDL (L. S. B.)		17
21	18:30	김영준	김영준	남	55	LDL (L. S. B.)		18
21	19:00	김영준	김영준	남	55	LDL (L. S. B.)		19
21	19:30	김영준	김영준	남	55	LDL (L. S. B.)		20
21	20:00	김영준	김영준	남	55	LDL (L. S. B.)		21
21	20:30	김영준	김영준	남	55	LDL (L. S. B.)		22
21	21:00	김영준	김영준	남	55	LDL (L. S. B.)		23
21	21:30	김영준	김영준	남	55	LDL (L. S. B.)		24
21	22:00	김영준	김영준	남	55	LDL (L. S. B.)		25

25 cirugías !!!









En conclusión....

- Tecnología actualizada.
- Resultados al menos similares al “gold standard”.
- Muchas ventajas y pocas desventajas.
- Indicaciones en aumento/desarrollo.
- Entrenamiento demandante: inicial en Animales- Cadavérico-Asistencia en Pacientes- Cirugía asistida.
- Cirugía en etapas.
- Trabajo serio y selección adecuada de pacientes.
- Impacto en marketing.
- “Less is more”

Gamsahamnida

감사합니다