

Punción guiada por **USE** en **tumores subepiteliales** de la pared del tracto digestivo



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TSE: Frecuentes e ...¿importantes?

- En **1%** de todas las EDAs
- Sólo **15%** SET's son malignos en origen

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 - 35% tienen algún potencial de malignización

TSE: Frecuentes e ...¿importantes?

- En **1%** de todas las EDAs
- Sólo 15% SET's son malignos en origen
 - 35% tienen algún potencial de malignización
- **Además.....**
 - Importante **carga de trabajo** para USE
 - Diagnóstico inicial
 - Seguimientos programados

TSE: **Objetivos** de la USE

- Definir con **exactitud** su naturaleza
 - Criterios de **imagen**
 - Endoscopia “pura”
 - USE
 - USE contraste
 - USE elastografía

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- Definir con **exactitud** su naturaleza
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 - Técnicas **AP:**
 - USE-PAAF
 - Otras técnicas

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 - USE
 - USE contraste
 - USE elastografía
 - Técnicas AP:
 - USE-PAAF
 - Otras técnicas
 - **Más allá** de la USE-PAAF....

TSE: Objetivos de la USE

- Definir con exactitud su naturaleza
 - *Criterios de imagen +/- técnicas AP.....*

Benignos

Con potencial
malignidad

Malignos

TSE: Objetivos de la USE

- Definir con exactitud su naturaleza
 - *Criterios de imagen +/- técnicas AP.....*

Benignos



Con potencial
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Únicos
candidatos
"reales" para
seguimiento

Malignos



TSE: Objetivos de la USE

- Definir con exactitud su naturaleza
 - Criterios de **imagen**

- ¿ Cuáles son?
- ¿ Son suficientes por sí solos?
- ¿ Qué dicen las guías?

TSE: Objetivos de la USE

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 - Criterios de **imagen**

- ¿ Cuáles son?
- ¿ Son suficientes por sí solos?
- ¿ Qué dicen las guías?

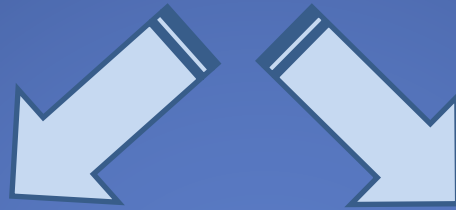
Guideline

Endoscopic management of subepithelial lesions including
neuroendocrine neoplasms: European Society of Gastro-
intestinal Endoscopy (ESGE) Guideline

Thieme



TSE: criterios de **imagen** USE

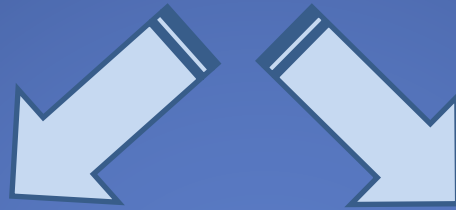


- **Patrón ecogénico**

- *Homogéneo (o no)*
- *Hiper-Iso-Hipo*
- *Bordes...*

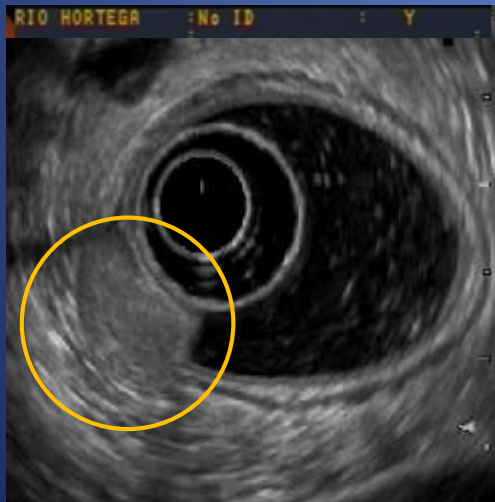
'Site & Size'

TSE: criterios de **imagen** USE



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 - *Hiper-Iso-Hipo*

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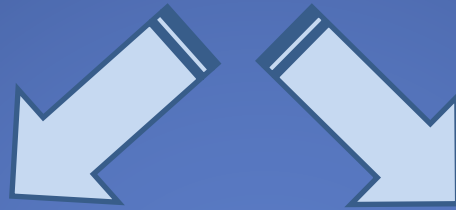


TSE: criterios de imagen USE

- Según patrón ecogénico....

| | HIPER. | HIPO. | ANECOICAS |
|--------------------------|---------------|--------------|------------------|
| Lipomas | X | | |
| Varices | | | X |
| Linfangiomas | | | X |
| Quistes Dup | | | X |
| Leiomioma | | X | |
| Schwannoma | | X | |
| Abrikossoff | | X | |
| Carcinoide | | X | |
| PFI | | X | |
| Mtx | | X | |
| Linfomas | | X | |
| Páncreas Ectópico | | X | |
| GIST | | X | |

TSE: criterios de **imagen** USE



- Patrón ecogénico
 - Homogéneo (o no)
 - Hiper-Iso-Hipo
 - Bordes...

'Site & Size'



- Por **órgano**
- Por **capa**

- **< 2 cm**
- **> 2 cm**

TSE: 'site'

- 1. Localización anatómica "por órgano":

| LESIÓN | ESÓFAGO | ESTÓMAGO/ DUODENO |
|-----------------------|----------------------|----------------------|
| Leimioma | Muy frecuente (>70%) | Excepcional |
| GIST | Excepcional | Muy frecuente (>50%) |
| Abrikossoff | Frecuente (13-20%) | Raro |
| Quistes | Frecuente (10%) | Frecuente (10%) |
| Lipomas | Ocasional (1%) | Frecuente (10%) |
| Hemangiomas | Raro (1%) | Raro (1%) |
| Páncreas ectópico | Nunca | Frecuente (20%) |
| Carcinoide | Nunca | Frecuente (10%) |
| Compresión extrínseca | Frecuente | Menos frecuente |

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TSE: 'site'

- 2. Localización anatómica " por capa":

| Pathology | Muscularis mucosa | Submucosa | Muscularis propria | Serosa |
|---------------------------------|-------------------|-----------|--------------------|--------|
| GIST | x | | X | |
| Leiomyoma | x | | X | |
| Lipoma | | X | | |
| Granular cell tumor | X | X | | |
| Pancreatic rest | | X | | |
| Carcinoid (NET) | | X | | |
| Duplication cyst | X | X | X | X |
| Fibroid lesion | | X | | |
| Varices | | X | | |
| Lymphangioma | | X | | |
| Neural tumors (e.g. Schwannoma) | | X | X | |

GIST, gastrointestinal stromal tumor; NET, neuroendocrine tumor.

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TSE ¿ Son suficientes los criterios
de **imagen**?

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- USE: precisión diagnóstica:
 - Dx compresión extrínseca vs TSE: 92%
 - Lipomas, varices, quistes: 100%

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- USE: precisión diagnóstica:
 - Dx compresión extrínseca vs TSE: 92%
 - Lipomas, varices, quistes: 100%

Sin embargo.....

- precisión detección **por capa**: 63-74%
- precisión en lesiones **< 2cm**: < 45%
- precisión **GIST** vs leiomiomas: 45-48%



TSE ¿ Son suficientes los criterios de imagen?

Guideline

Thieme

Endoscopic management of subepithelial lesions including neuroendocrine neoplasms: European Society of Gastrointestinal Endoscopy (ESGE) Guideline



Role of EUS in detection and characterization of SELs

RECOMMENDATION

ESGE recommends endoscopic ultrasonography (EUS) as the best tool to characterize SEL features (size, location, originating layer, echogenicity, shape), but EUS alone is not able to distinguish among all types of SEL. Strong recommendation, moderate quality evidence.

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Strong recommendation

RECOMMENDATION

ESGE suggests that CH-EUS can be used for characterization of SELs in the upper digestive tract and estimation of the malignant potential of GISTs, but it cannot replace EUS tissue acquisition. Moreover, ESGE suggests that there is insufficient evidence to recommend EUS-E in the diagnosis and management of SELs.

Weak recommendation, low quality evidence.

¿Contrastes?
¿Elastografía?



TSE ¿ Son suficientes los criterios de imagen?

ORIGINAL ARTICLE: Clinical Endoscopy

Accuracy of EUS in the evaluation of small gastric subepithelial lesions

Cetin Karaca, MD,* Brian G. Turner, MD,* Sevdener Cizginer, MD, David Forcione, MD, William Brugge, MD
Boston, Massachusetts, USA

Volume 71, No. 4 : 2010 GASTROINTESTINAL ENDOSCOPY



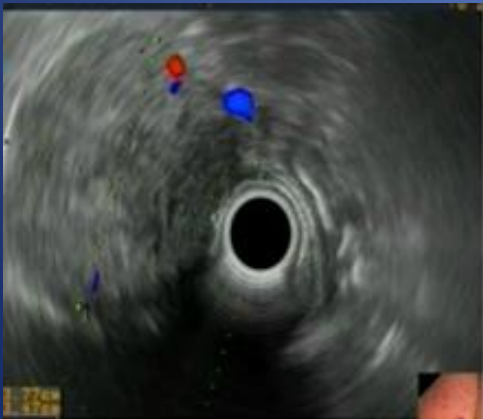
What this study adds to our knowledge

- In a retrospective study of 22 patients who underwent endoscopic resection of a gastric subepithelial lesion, the accuracy of the EUS diagnosis was 45.5% compared with histologic results.

¿Cuándo es necesario el estudio cito-histológico?

- **No hay evidencia** de si resulta necesario.....
 - Para **todas** la lesiones
 - Solo para las > 2 cm
 - Solo para las que presentan "signos de riesgo"
 - Siempre que se sospeche GIST

.....



Indications, results, and clinical impact of endoscopic ultrasound (EUS)-guided sampling in gastroenterology: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline

¿Cuándo es necesario el estudio cito-histológico?

- ***Siempre:***

- Si su resultado puede cambiar el manejo



¿Cuándo es necesario el estudio cito-histológico?

- **Siempre:**

- Si su resultado puede cambiar el manejo

- Pacientes con sospecha de **GIST**

- con semiología "de riesgo"

- irresecable (*candidatos a tto con Ø TK*)

¿Cuándo es necesario el estudio cito-histológico?

- ***Nunca:***

- Pacientes sintomáticos, con cirugía imprescindible
- Pacientes no candidatos a tratamiento

¿Cuándo es necesario el estudio cito-histológico?

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- Pacientes no candidatos a tratamiento

- Lesiones < **2cm** , en esófago o estómago (?)
- Lesiones con patrón USE patognomónico
 - Lipomas
 - Quistes de duplicación

TSE *¿Cuándo es necesario el estudio cito-histológico?*

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Endoscopic management of subepithelial lesions including neuroendocrine neoplasms: European Society of Gastrointestinal Endoscopy (ESGE) Guideline



When is tissue required?

RECOMMENDATION

ESGE suggests providing tissue diagnosis for all SELs with features suggestive of GIST, if they are of size > 20 mm, or have high risk stigmata, or require surgical resection or oncological treatment.

Weak recommendation, very low quality evidence.

TSE *¿Cuándo es necesario el estudio cito-histológico?*

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Technical aspects of endoscopic ultrasound (EUS)-guided sampling in gastroenterology: European Society of Gastrointestinal Endoscopy (ESGE) Technical Guideline – March 2017



*“...**se recomienda** toma cito-histológica de lesiones asintomáticas hipoecoicas > 2 cm de estómago o cardias **siempre que sean candidatas a tratamiento o seguimiento...**”*

TSEs & USE:

6 preguntas previas

1.- Mural o extramural?

- *Compresión extrínseca*

2.- Hipoecoica o no?

- *Hiper: Lipoma*

3.- De capa mucosa o no?

- *Si capa mucosa : Bx con pinza*

TSE & USE:

6 preguntas previas

4.- Capa submucosa y resecable?

- *Plantear SINK/MIAB*

5.- Capa muscular/adventicia

- *Necesaria cito-histología?*

6.- ¿ Extirpar, vigilar o ignorar?

TSE & USE: Sistemática

- 9 Variables:



¿Opciones antes de la PAAF en lesiones "pequeñas y superficiales?"

Requisito **previo:**
Biopsias endoscópicas técnica
"bite-on-bite" en el momento del
diagnóstico



European Society of
ESGE Gastrointestinal Endoscopy

- Evidencia *muy débil*
- Rdto. Diagnóstico medio:
62% (17-94%)

Técnicas previas de biopsia:

- Tras caracterización USE-R.....
 - Y especialmente en lesiones
 - Pequeñas
 - Capa mucosa/submucosa:

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- Tras caracterización USE-R.....
 - Y especialmente en lesiones
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1-Pinza de biopsia convencional/alta capacidad/
tunelización

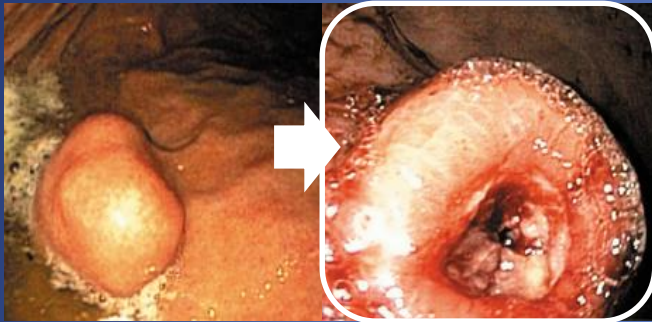
2-Unroofing

3-Resección submucosa con asa o banda

4-Biopsia incisional: Keyhole

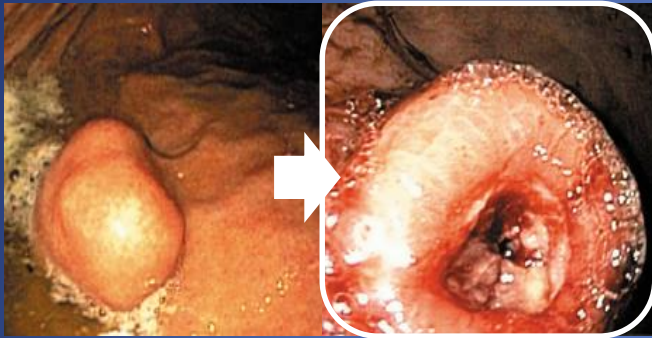
Técnicas de biopsia:

- Biopsia/Bite-on-Bite

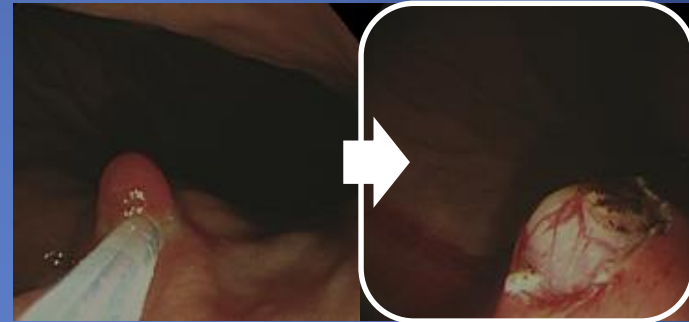


Técnicas de biopsia:

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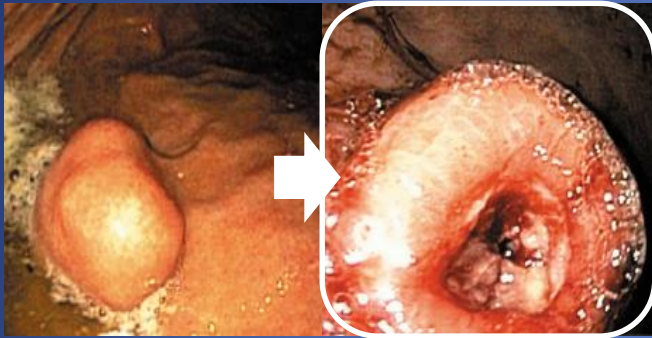


- **Unroofing**

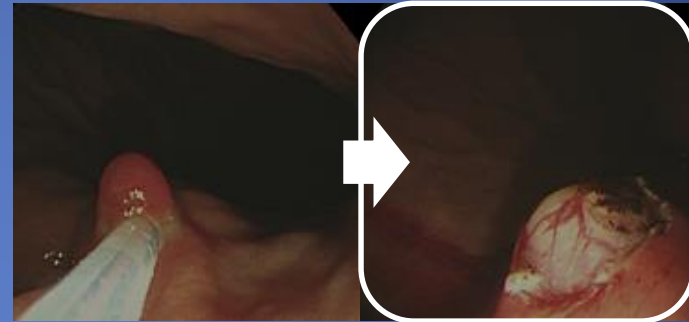


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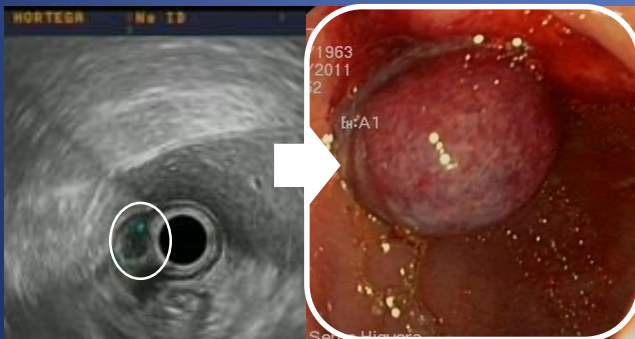
- **Biopsia/Bite-on-Bite**



- **Unroofing**

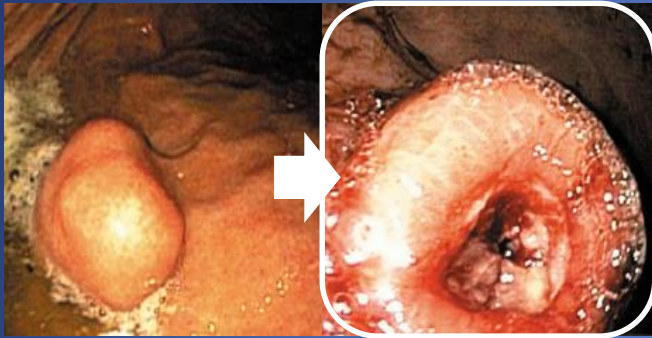


- **Resección con banda**

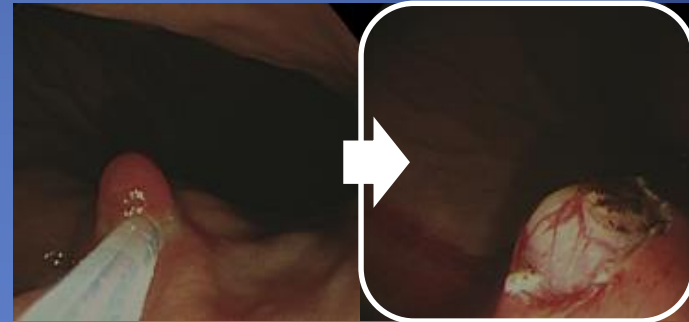


Técnicas de biopsia:

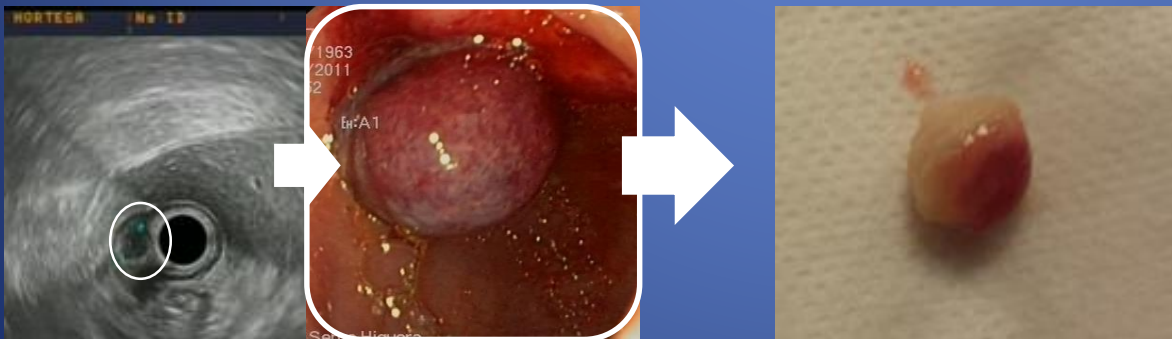
- **Biopsia/Bite-on-Bite**



- **Unroofing**



- **Resección con banda**



.....**Si las biopsias resultan negativas....**
técnicas de adquisición de tejido
“ en profundidad”

- USE - PAAF
- Técnicas de incisión mucosa

USE-PAAF para TSE:

Tipos de aguja

Indicaciones

Resultados

Seguridad

Limitaciones y alternativas

USE-PAAF para TSE: **indicaciones**

- Lesiones de “capa **profunda**”
- Pacientes **candidatos** tratamiento
- “**Sospechosos**” por endoscopia o USE
- El caso especial de los **GISTs....**

USE-PAAF para TSE: indicaciones

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Weak recommendation, very low quality evidence.

USE-PAAF para TSE: indicaciones

- Sospecha de **GIST** con semiología de **riesgo**

Malignant features on endoscopy

- Large size (≥ 2 cm)
- Ulceration
- Irregular surface
- Growth during follow-up

Malignant features on EUS

- Echogenic foci > 3 mm
- Cystic spaces > 4 mm
- Irregular border
- Adjacent lymph node

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TODOS los GIST independientemente de tamaño o semiología USE

USE-PAAF para TSE: **tipos de aguja**

Agujas **“convencionales”**:

25-22-19

Agujas **“histológicas”**:

22-19

1. agujas “ convencionales”



European Society of
ESGE Gastrointestinal Endoscopy

Calibres: 25-22-19

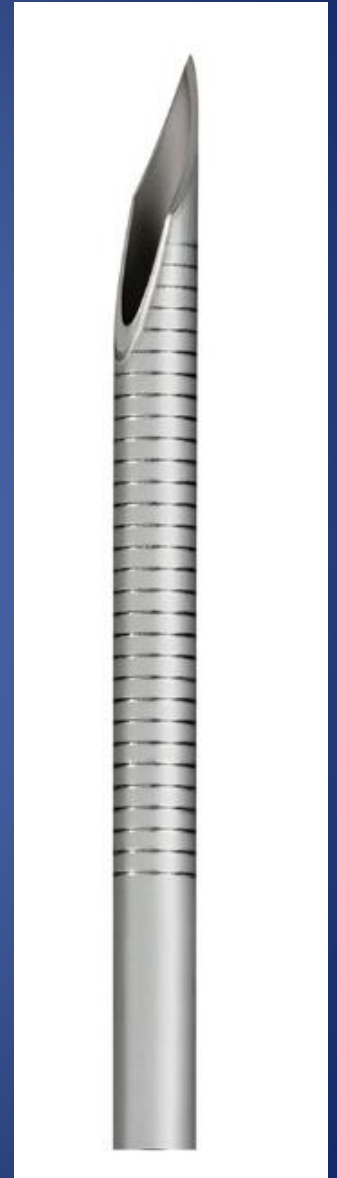
Fanning

Estilete

Aspiración vacío

ROSE-MOSE

Número de pases



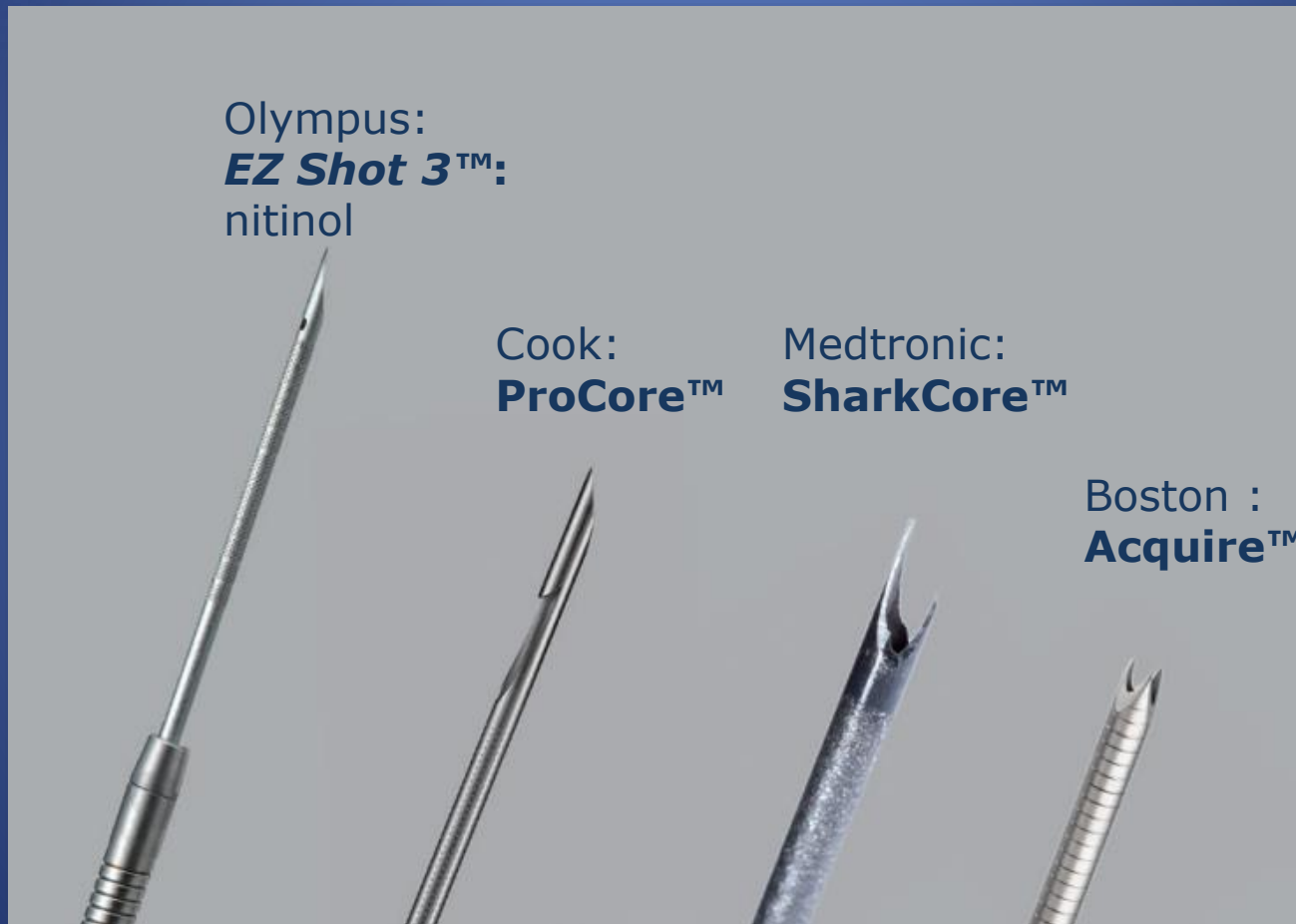
1. agujas “ convencionales”



European Society of
ESGE Gastrointestinal Endoscopy

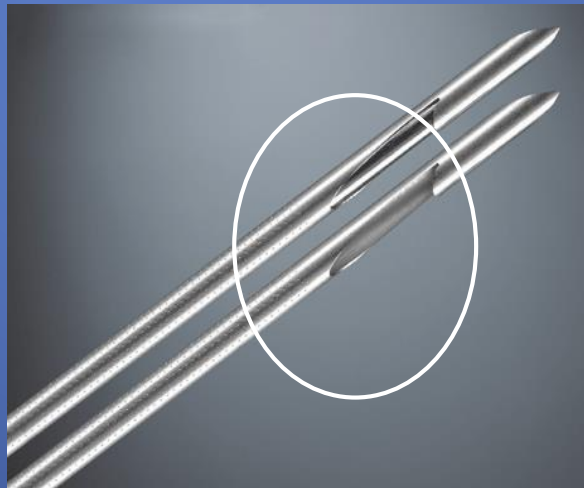
| | |
|-------------------------|--------------------|
| Calibres:25-22-19 | Igual resultado |
| Fanning | SÍ (4 x 4) |
| Estilete | Igual resultado |
| Aspiración vacío | SÍ |
| ROSE | Igual resultado |
| Número de pases | 3-4 si no ROSE |

2. agujas "histológicas": tipos



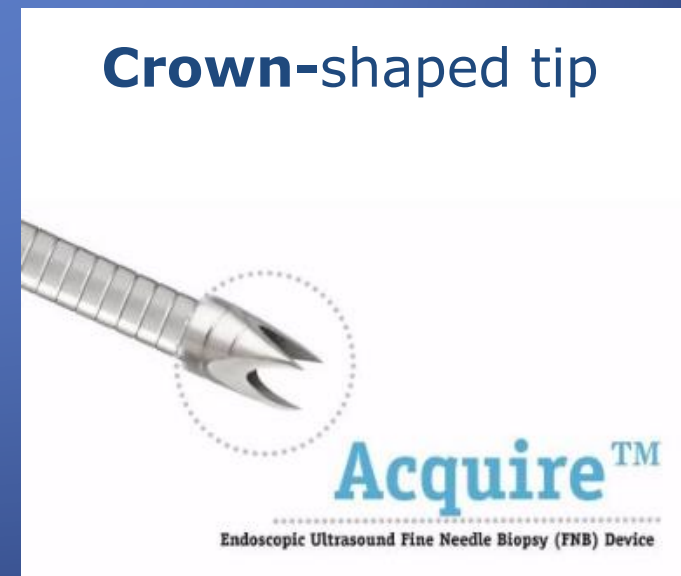
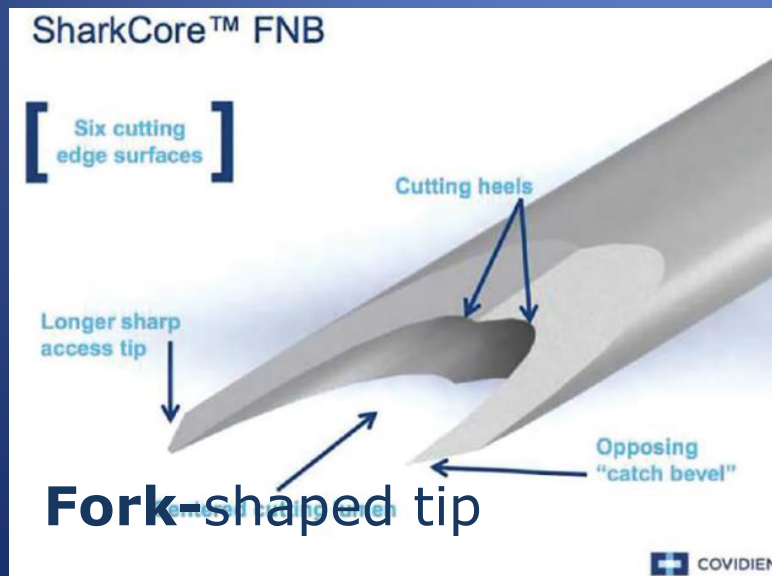
aguja "histológicas": tipos

| Needle type (available gauge sizes), manufacturer | Key features |
|---|---|
| Echotip ProCore (19G, 22G, 25G), Cook Medical | <u>Reverse bevel</u> : modified Menghini-type needle with a beveled side-slot near the needle tip. Slot cutting edge directed <u>backward</u> to collect tissue during retrograde movement of the needle. |
| Echotip ProCore (20G), Cook Medical | <u>Antegrade core trap</u> : modified Menghini-type needle with a beveled side-slot near the needle tip. Slot cutting edge directed <u>forward</u> to cut tissue during antegrade movement of the needle. |





aguja "histológicas": tipos

| Needle type (available gauge sizes), manufacturer | Key features |
|---|---|
| SharkCore (19G, 22G, 25G), Medtronic | Fork-shaped tip: end-cutting needle with a fork-shaped distal tip including six cutting edges and an opposing bevel. No side-slot. |
| Acquire (22G, 25G), Boston Scientific | Franseen tip geometry: end-cutting needle with a crown-shaped distal tip including three symmetrical beveled cutting edges. No side-slot. |



¿ Aguja "citológica" o aguja
"histológica" para SET's?

| Pros  | Cons  |
|--|--|
| | |

agujas “histológicas” para SETs

- **¿Ventajas teóricas?**



agujas “histológicas” para SETs

- **¿Ventajas** teóricas? **1^a** condición:

“ Una muestra “**histológica**” exige un procesamiento “histológico”

aguja "histológica" para SETs

- Una muestra "histológica" exige un procesamiento "histológico"

Guideline

Specimen processing

RECOMMENDATION

ESGE suggests that evaluation of tissue obtained by EUS-guided sampling should include histologic preparations (e.g., cell blocks and/or formalin-fixed and paraffin-embedded tissue fragments) and not be limited to smear cytology (low quality evidence, weak recommendation).

agujas "histológicas" para SETs

- Una muestra "**histológica**" exige un procesamiento "histológico"
 - "Histología" (bloque celular) \pm **citología**
 - ¿ **Quién** procesa la muestra?.....



aguja "histológica" para SETs

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 - "Histología" (bloque celular) \pm **citología**
 - ¿ **Quién** procesa la muestra?
 - El **patólogo** o el citotécnico: **ROSE**
 - *No evidencia superioridad de ROSE*
 - El **endoscopista**

agujas “histológicas” para SETs

- Una muestra “**histológica**” exige un procesamiento “histológico”
 - “Histología” (bloque celular) \pm **citología**
 - ¿ **Quién** procesa la muestra?
 - El **patólogo** o el citotécnico: **ROSE**
 - El **endoscopista**:
 - El endoscopista “**facturador**”
 - El endoscopista “**implicado**”: **MOSE**

aguja "histológica" : ¿ROSE ?

- FNB: **NO** imprescindible patólogo "in situ"

Guideline

Technical aspects of endoscopic ultrasound (EUS)-guided sampling in gastroenterology: European Society of Gastrointestinal Endoscopy (ESGE) Technical Guideline – March 2017



On-site cytologic evaluation

RECOMMENDATION

ESGE **equally recommends** EUS-guided sampling with or without on-site cytologic evaluation (moderate quality evidence, strong recommendation).

aguja "histológicas" : ¿ROSE ?

- FNB: "ahorra" número de pases

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Technical aspects of endoscopic ultrasound (EUS)-guided sampling in gastroenterology: European Society of Gastrointestinal Endoscopy (ESGE) Technical Guideline – March 2017



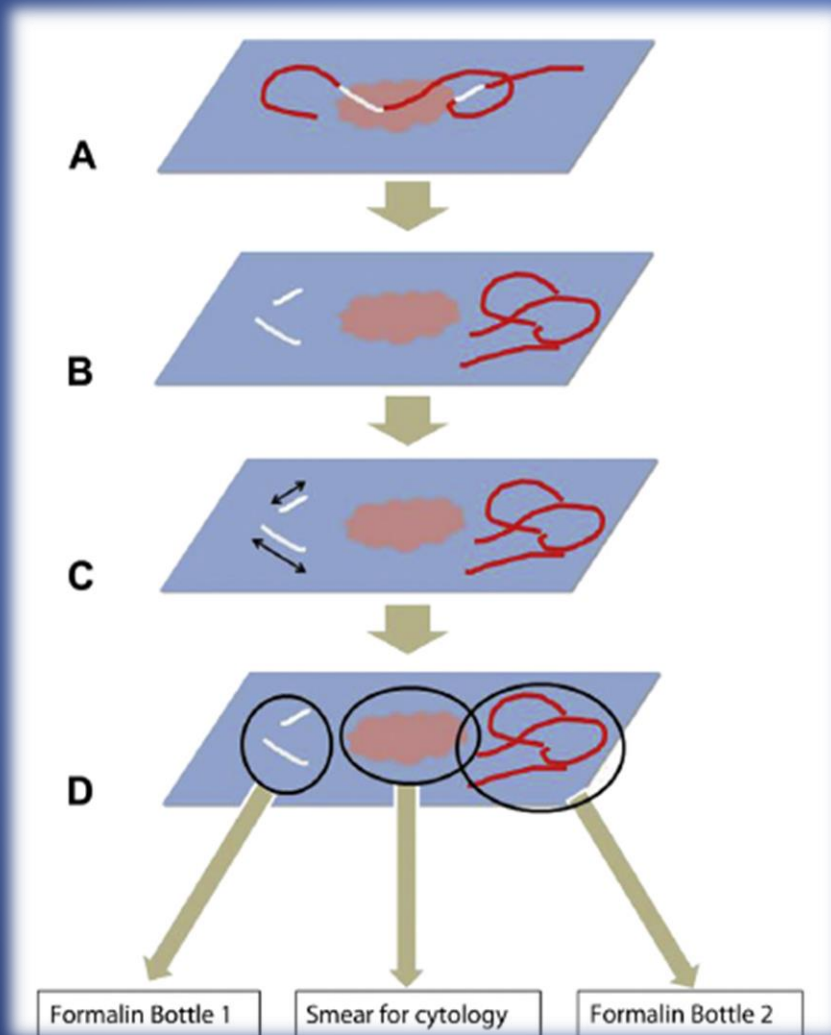
Number of needle passes in the absence of on-site evaluation

RECOMMENDATION

When on-site cytologic evaluation is unavailable, ESGE suggests performance of three to four needle passes with an FNA needle or two to three passes with an FNB needle (low quality evidence, weak recommendation).

Procesamiento de las muestras por el endoscopista : **MOSE**

'Macroscopic On-Site Examination'



paaf en SETs:evidencia

Diagnostic efficacy of endoscopic ultrasound-guided needle sampling for upper gastrointestinal subepithelial lesions: a meta-analysis

Xiao-Cen Zhang¹ · Quan-Lin Li¹ · Yong-Fu Yu² · Li-Qing Yao¹

Surg Endosc (2016) 30:2431–2441

DOI 10.1007/s00464-015-4494-1



paaf en SETs:evidencia



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Χαίρο-Τσεν Ζαβανζ, Τόαν-Λιν Λι, Λονγ-Επ Λυ, Λι-Τσινγκ Γιαο

Results Seventeen studies, comprising 978 attempts of EUS-guided needle sampling, were included in a meta-analysis. Pooled diagnostic rate of EUS-guided needle sampling was 59.9 %, with a heterogeneity I^2 of 55.2 %. Subgroup analysis showed no difference in diagnostic rate among fine needle aspiration (FNA), trucut needle biopsy (TCB), and fine needle biopsy (FNB), or among 19-, 22-, and 25-G needles. Subgroup analysis and meta-regression

ανη 52-Γ ηεεθιες: Ζηρηγιονη ανηλγσιη ανη μεηα-ρεγιεησιον
(TCB) ανη ηηε ηεεθιε ριθηλ (FNB) οη ανηουη 19-, 22-

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paaf en SETs:evidencia



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FNA = FNB = TCB

19G = 22G = 25G

Paaf en SETs: evidencia (**la más reciente!!** FNA vs FNB)

SYSTEMATIC REVIEW AND META-ANALYSIS

Comparison between fine-needle biopsy and fine-needle aspiration for EUS-guided sampling of subepithelial lesions: a meta-analysis 📺



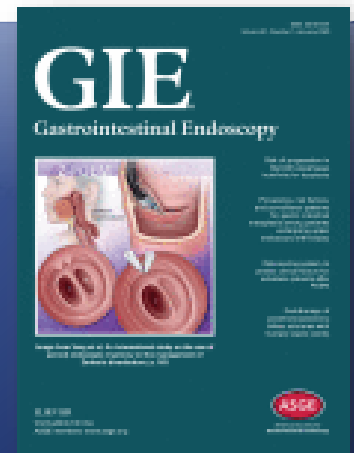
Antonio Facciorusso, MD, PhD,¹ Sumsum P. Sunny, MD,² Valentina Del Prete, MD,¹ Matteo Antonino, MD,¹ Nicola Muscatiello, MD¹

Foggia, Italy; Bangalore, India

GASTROINTESTINAL ENDOSCOPY Volume 91, No. 1 : 2020

Foggia, Italy; Bangalore, India

Nicola Muscatiello, MD

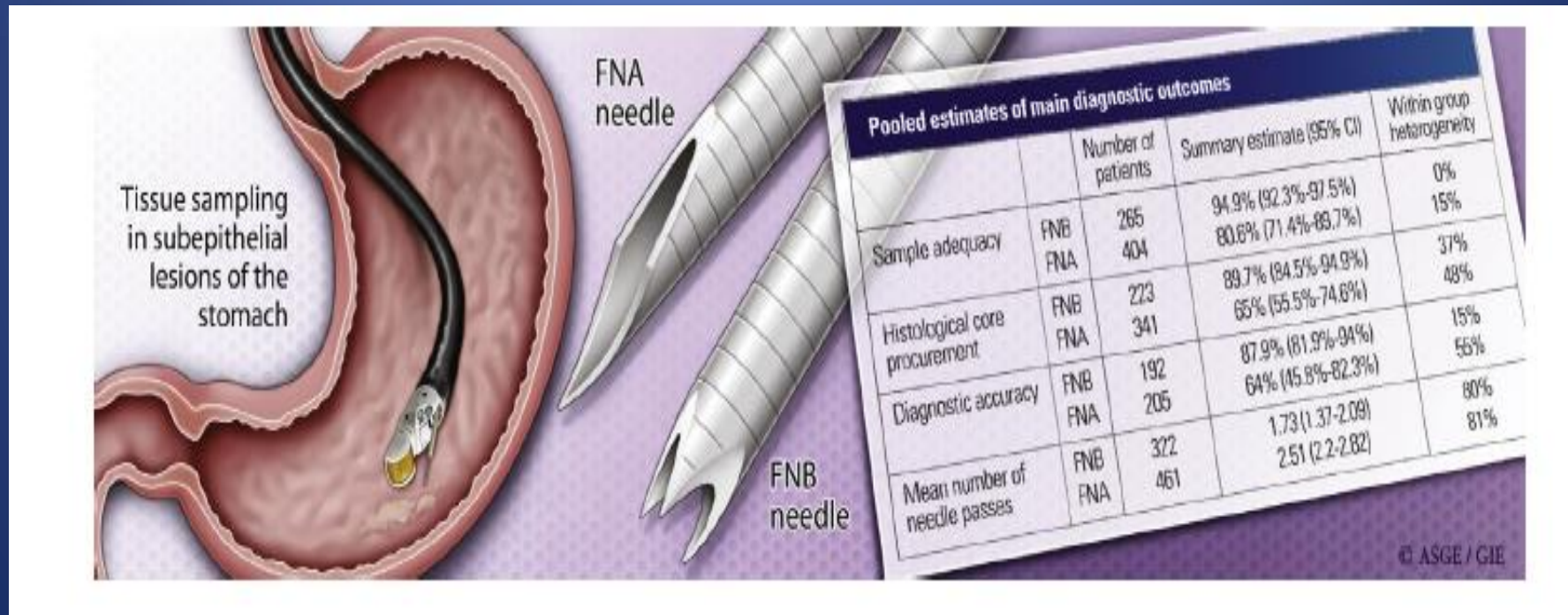


Paaf en SETs: evidencia (**la más reciente!!** FNA *vs* FNB)

- 10 estudios
- 6 RCT
- **669** pacientes
- **Parámetros** evaluados:
 - **Adecuación** de las muestras
 - Obtención de cilindro **“histológico”**
 - **Precisión** diagnóstica
 - Número de **pases**

Paaf en SETs: evidencia (**la más reciente!!** FNA vs FNB)

- 10 estudios
- 6 RCT
- **669** pacientes



Paaf en SETs: evidencia (**la más reciente!!** FNA vs FNB)

- 10 estudios
- 6 RCT
- **669** pacientes



Conclusions: Our results speak clearly in favor of FNB sampling, which was found to outperform FNA in all diagnostic outcomes evaluated. (Gastrointest Endosc 2020;91:14-22.)

paaf en SETs: GISTs

limitaciones

*“La determinación de Ki-67 e IM **no es fiable** mediante agujas convencionales por la tendencia a la **infraestadificación**”*



European Society of
ESGE Gastrointestinal Endoscopy

RECOMMENDATION

ESGE recommends that the mitotic count or Ki67 labeling index determined on samples acquired under EUS guidance from gastrointestinal stromal tumors should not be used as evidence of low malignant potential of the tumor.

Strong recommendation, low quality evidence.

paaf en SETs:GISTs

limitaciones y soluciones (?)

*“La determinación de Ki-67 e IM **no es fiable** mediante agujas convencionales por la tendencia a la **infraestadificación**”*



European Society of
ESGE Gastrointestinal Endoscopy

- Dificultad para **IHQ**
- Imposibilidad para
 - Indice Mitótico** y evaluar potencial maligno:

paaf en SETs:GISTs

limitaciones y soluciones (?)

*"La determinación de Ki-67 e IM **no es fiable** mediante agujas convencionales por la tendencia a la **infraestadificación**"*



European Society of
ESGE Gastrointestinal Endoscopy

- Dificultad para **IHQ**
- Imposibilidad para
-**Indice Mitótico** y evaluar potencial maligno:

Cálculo IM: necesarios ≥ 50 HPF



Aguja 19G: ≤ 20 HPF.....

paaf en SETs: limitaciones y soluciones (?)

"La determinación de Ki-67 e IM no es fiable mediante agujas convencionales por la tendencia a la infraestadificación"



European Society of
ESGE Gastrointestinal Endoscopy



Técnicas alternativas de
biopsia directa subepitelial

paaf en SETs: limitaciones y soluciones (?)

"La determinación de Ki-67 e IM no es fiable mediante agujas convencionales por la tendencia a la infraestadificación"



European Society of
ESGE Gastrointestinal Endoscopy



Técnicas alternativas de **biopsia directa subepitelial**

- ESD + biopsia en bloque
- Unroofing
- **Needle- Knife:**
 - ➔ KeyHole
 - SINK

paaf en SETs: limitaciones y soluciones (?)

"La determinación de Ki-67 e IM no es fiable mediante agujas convencionales por la tendencia a la infraestadificación"



European Society of
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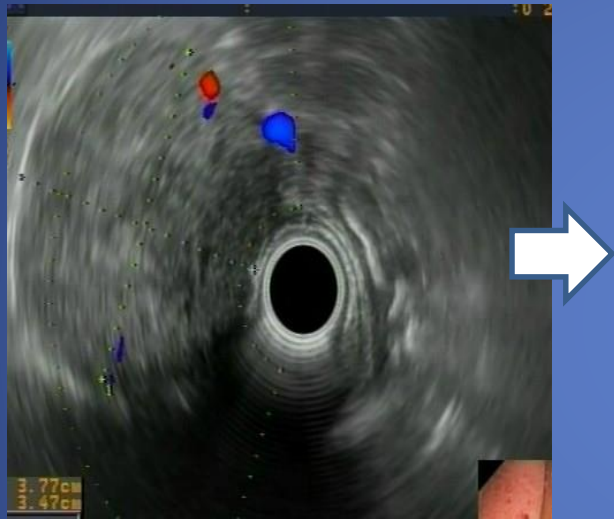
Técnicas alternativas de **biopsia directa subepitelial**


ESD + biopsia en bloque

- Unroofing
- Needle- Knife:
KeyHole
SINK

"MIAB"
Mucosal
Incision
Assisted
Biopsy

SINK: Single Incision Needle-Knife biopsy



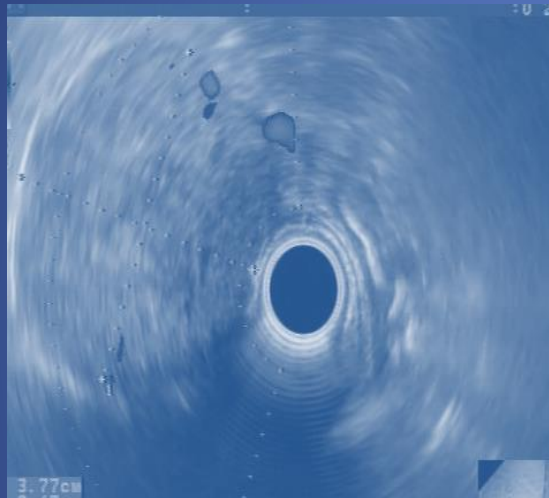
EUS-guided single-incision needle-knife biopsy: description and results of a new method for tissue sampling of subepithelial GI tumors (with video) 

Carlos de la Serna-Higuera, MD,¹ Manuel Pérez-Miranda, MD,¹ Pilar Díez-Redondo, MD,¹
Paula Gil-Simón, MD,³ Teresa Herranz, MD,³ Elena Pérez-Martín, MD,² C. Ochoa, MD,³
Agustín Caro-Patón, MD¹

Valladolid, Spain


GASTROINTESTINAL ENDOSCOPY Volume 74, No. 3 : 2011

SINK: Single Incision Needle-Knife biopsy



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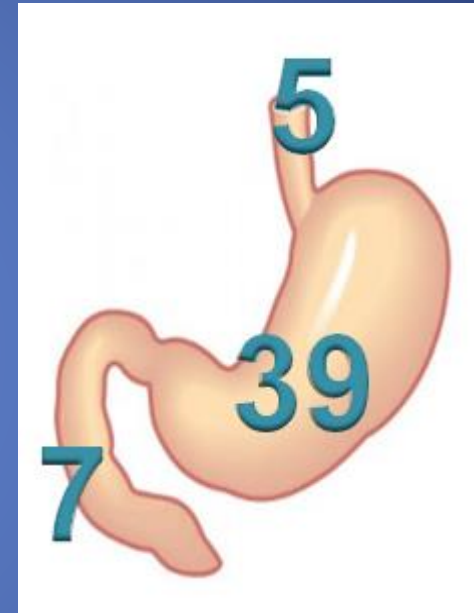
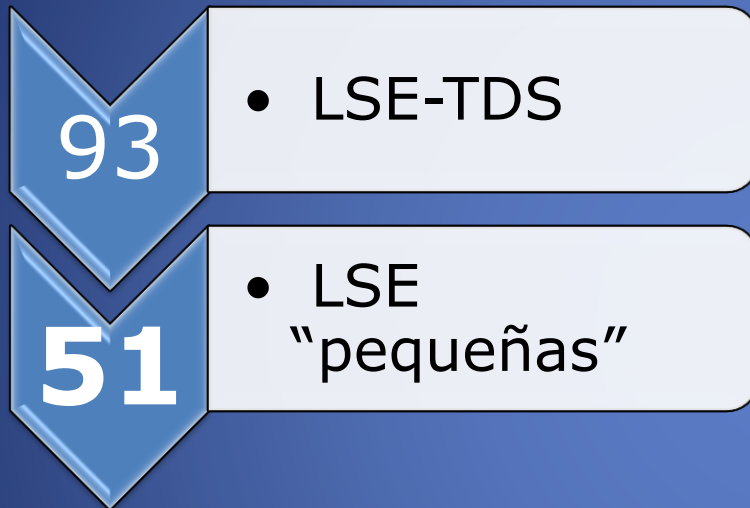
Valladolid, Spain

GASTROINTESTINAL ENDOSCOPY Volume 74, No. 3 : 2011

SINK EN SETs “pequeños”

- SINK **puede evitar seguimientos** mediante un diagnóstico preciso en un único procedimiento

SINK EN SETs “pequeños”



- Solo 4 muestras no diagnósticas
- Rendimiento diagnóstico: 47/51: **92.15%**

SINK EN SETs “pequeños”

CONCLUSIONES

El estudio de SET pequeñas mediante SINK permite un **alto rendimiento** diagnóstico que puede **evitar seguimientos** innecesarios a largo plazo

¿PAAF (FNB) o Biopsia Incisional en TSEs?

- Elección según tamaño:.... $\emptyset \geq 2 \text{ cm}$**FNB=MIAB**

RECOMMENDATION

ESGE recommends EUS-guided fine-needle biopsy (EUS-FNB) or mucosal incision-assisted biopsy (MIAB) equally for tissue diagnosis of SELs ≥ 20 mm in size.

Strong recommendation, moderate quality evidence.

¿PAAF (FNB) o Biopsia Incisional en TSEs?

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ESGE recommends EUS-guided fine-needle biopsy (EUS-FNB) or mucosal incision-assisted biopsy (MIAB) equally for tissue diagnosis of SELs ≥ 20 mm in size.
Strong recommendation, moderate quality evidence.

- $< 2 \text{ cm}$**MIAB**

RECOMMENDATION

ESGE suggests using **MIAB (first choice)** or EUS-FNB (second choice) for tissue diagnosis of SELs < 20 mm in size.
Weak recommendation, low quality evidence.

SEGURIDAD

USE-PAAF-LSE's

- Técnicas “seguras”: Riesgos generales↓↓↓(0.3%)

SEGURIDAD

- Técnicas “seguras”: Riesgos generales ↓↓↓

Sangrado

Infección

Perforación

Diseminación

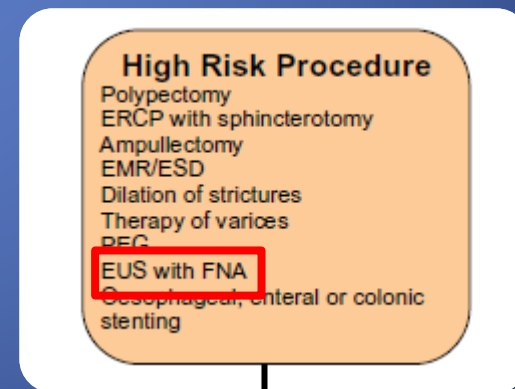


SEGURIDAD

- Técnicas “seguras”: Riesgos generales

Sangrado

- 0.4%
- Retirar antiagregantes/anticoagulantes!!



SEGURIDAD

- Técnicas “seguras”: Riesgos generales

Infección

- NO profilaxis (salvo SETs quísticos- ???-)
- Tampoco en tracto inferior

SEGURIDAD

- Técnicas “seguras”: Riesgos generales



Perforación

- Casos excepcionales

SEGURIDAD

- Técnicas “seguras”: Riesgos generales

Perforación

- Casos excepcionales

**DIAGNÓSTICO HISTOLÓGICO DE LESIÓN SUBEPITELIAL DE SIGMA PROXIMAL
POR USE-PAAF: PERFORACIÓN POSTPUNCIÓN Y CIERRE
CON TÉCNICA DE SOBRECILIP & “OMENTAL-PATCH”**

Carlos de la Serna Higuera, Fernando Santos Santamaría, Ramón Sánchez Ocaña,
Pilar Diez Redondo, Manuel Pérez Miranda

Unidad de Endoscopia, Servicio de Aparato Digestivo, Hospital Río Hortega, Valladolid



SEGURIDAD

- Técnicas “seguras”: Riesgos generales

Perforación

- Casos excepcionales.....



DIAGNOSTICO HISTOLOGICO DE LESION SUBEPTHELIAL DE SIGMA PROXIMAL

POB NCE PALE PERFORACION POSTPUNCION Y CIERRE

RECLIP & "OMENTAL-PATCH"

o Santos Santamaría, Ramón Sánchez Ocaña,

do, Manuel Pérez Miranda

gato Digestivo, Hospital Río Hortega, Valladolid

SEGURIDAD

- Técnicas “seguras”: Riesgos generales

Perforación

- Casos excepcionales....



Perforación Post 'Fanning'



Liberación de OVESCO™



Cierre con Omental Patch

SEGURIDAD

USE-PAAF LSE's

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Complications

Among the 17 studies included in this review, only three severe complications were reported. Polkowski et al. [30] reported two septic complications: one on an ulcerated tumor that eventually turned out to be a left liver lobe hepatoma invading the stomach (mistaken for an SMT on EUS) and the other on a 45-mm-large GIST. Eckardt et al. [21] reported one death resulted from multi-organ failure developed after complications caused by FNA of a large centrally necrotic GIST. Notably, all three complications occurred in large and/or ulcerated tumors and were all caused by 19-G needles (TCB by Polkowski, FNA by Eckardt).

Eckardt et al.

caused by 19-G needles (TCB by Polkowski, FNA by

SEGURIDAD

USE-PAAF

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USE-PAAF

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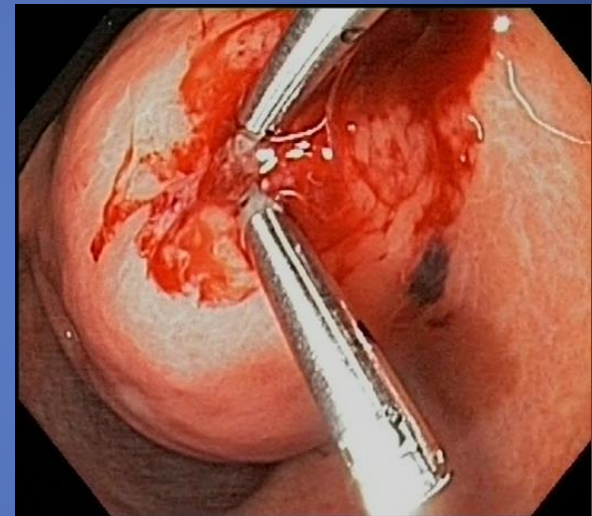
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Eckardt)

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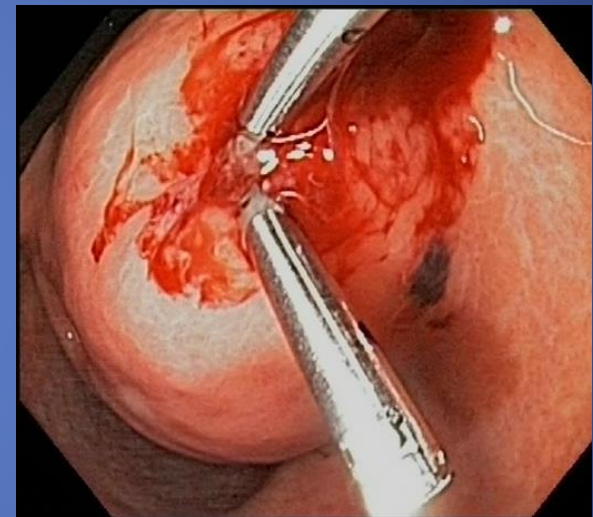
SEGURIDAD: SINK

- No complicaciones (93 casos)



SEGURIDAD: SINK

- No complicaciones (93 casos)



Original article

Thieme

Efficacy of single-incision needle-knife biopsy for sampling subepithelial lesions

Shimamura Yuto et al. Efficacy of single-incision... Endoscopy International Open 2017; 05: E5-E10

Authors

Yuto Shimamura¹, Jason Hwang^{1,2}, Maria Cirocco¹, Gary R. May¹, Jeffrey Mosko¹, Christopher W. Teshima¹

Institutions

¹ Division of Gastroenterology, St. Michael's Hospital, University of Toronto, Toronto, Ontario, Canada

Results Forty-nine patients underwent 50 SINK biopsies. Sufficient sampling for a definite pathologic diagnosis was obtained in 42 (86%) cases, with 91% (40/44) having sufficient sample to perform immunohistochemistry when deemed clinically relevant. Of the 26 patients with prior non-diagnostic biopsies or FNA, a specific diagnosis was obtained in 85% (22/26). There were no significant adverse events.

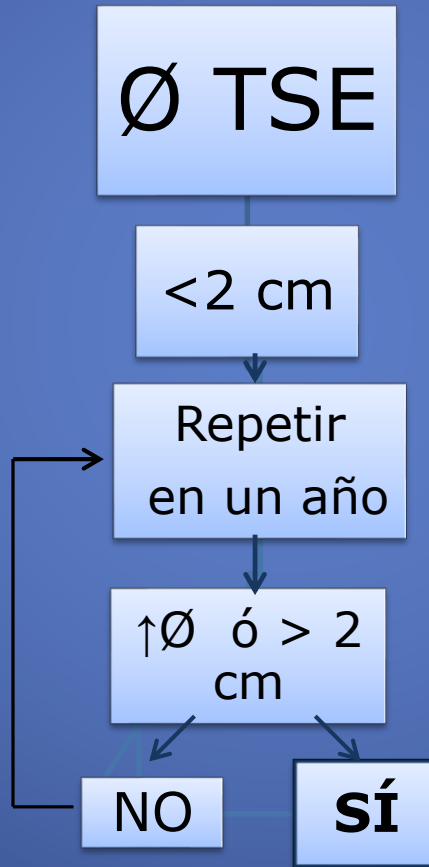
Conclusions SINK biopsy is a safe and feasible strategy for obtaining a definitive tissue diagnosis with immunohistochemistry for SELs.

Manejo TSE por USE: un algoritmo diagnóstico

1 Endoscopia: ➡ Medida y biopsias bite-on -bite.....

Manejo TSEs por USE: un algoritmo diagnóstico

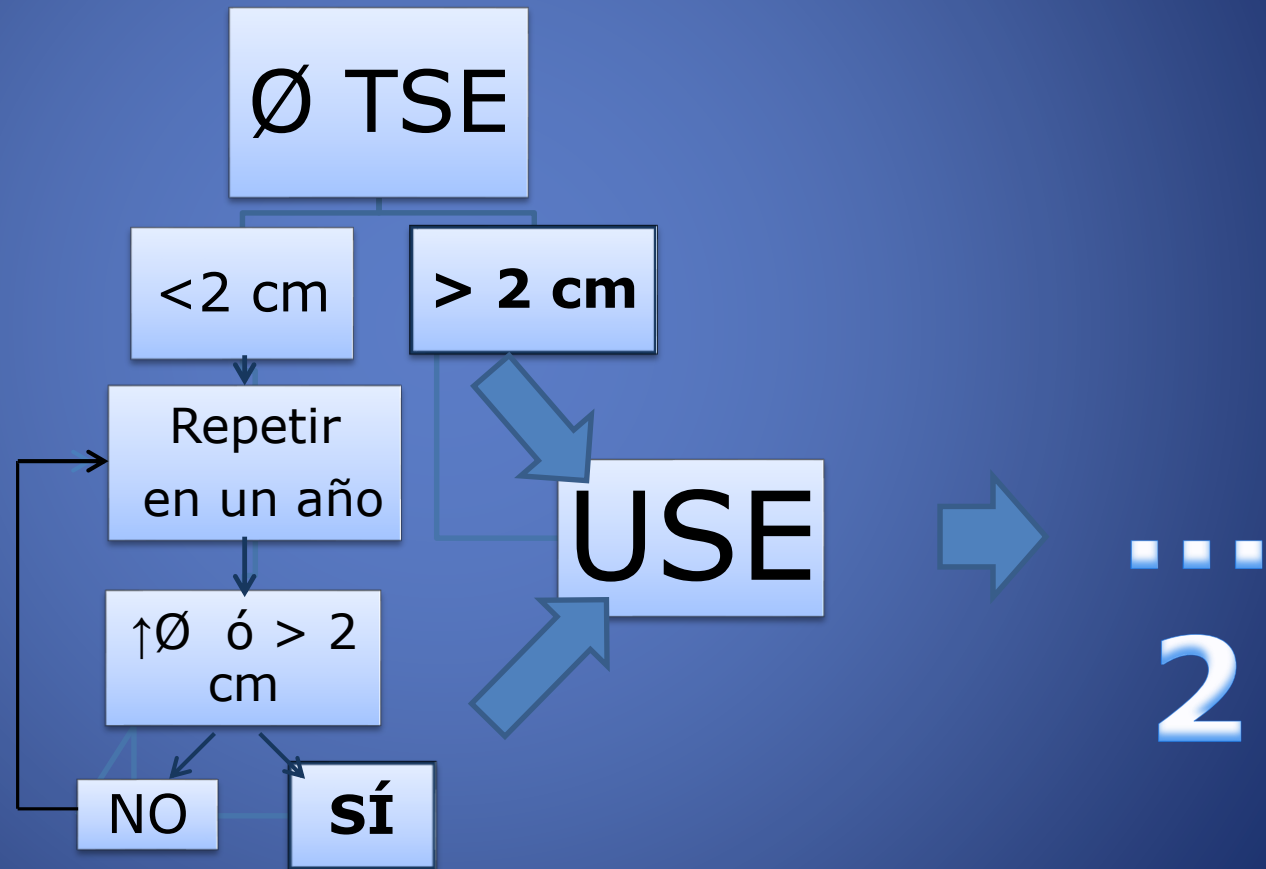
1 Endoscopia:



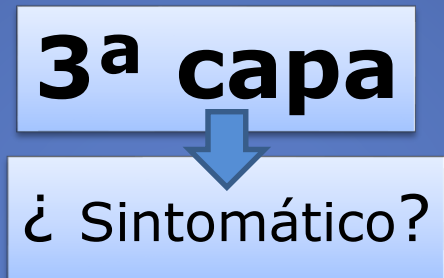
→ ...
2

Manejo TSEs por USE: un algoritmo diagnóstico

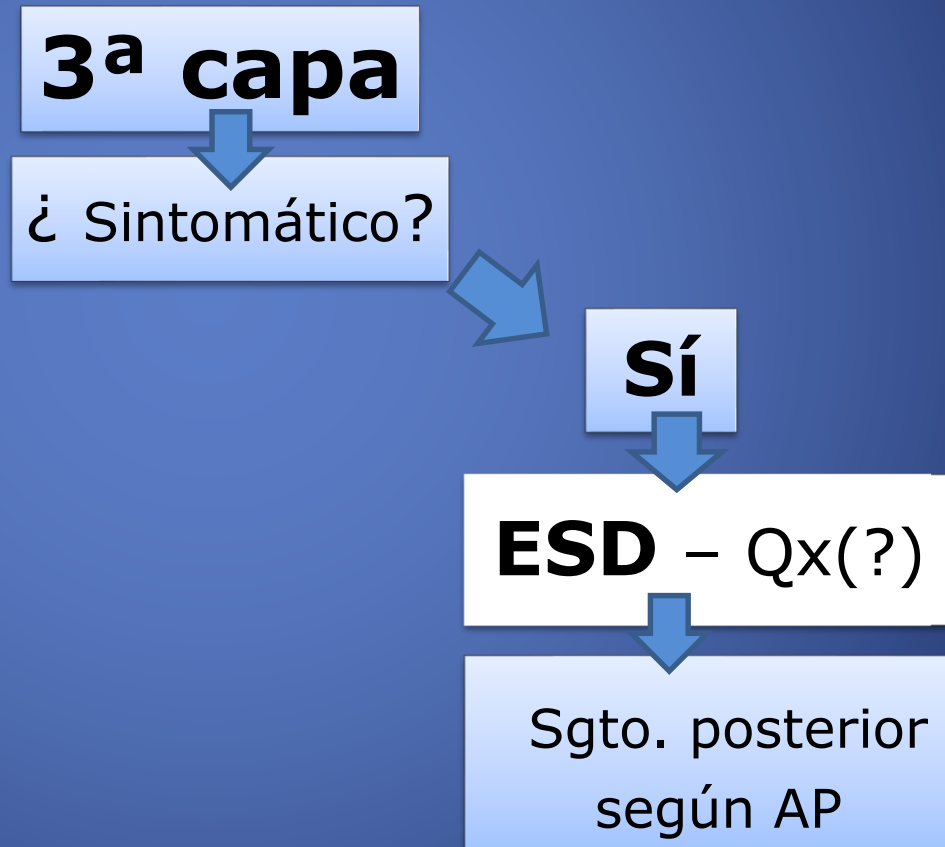
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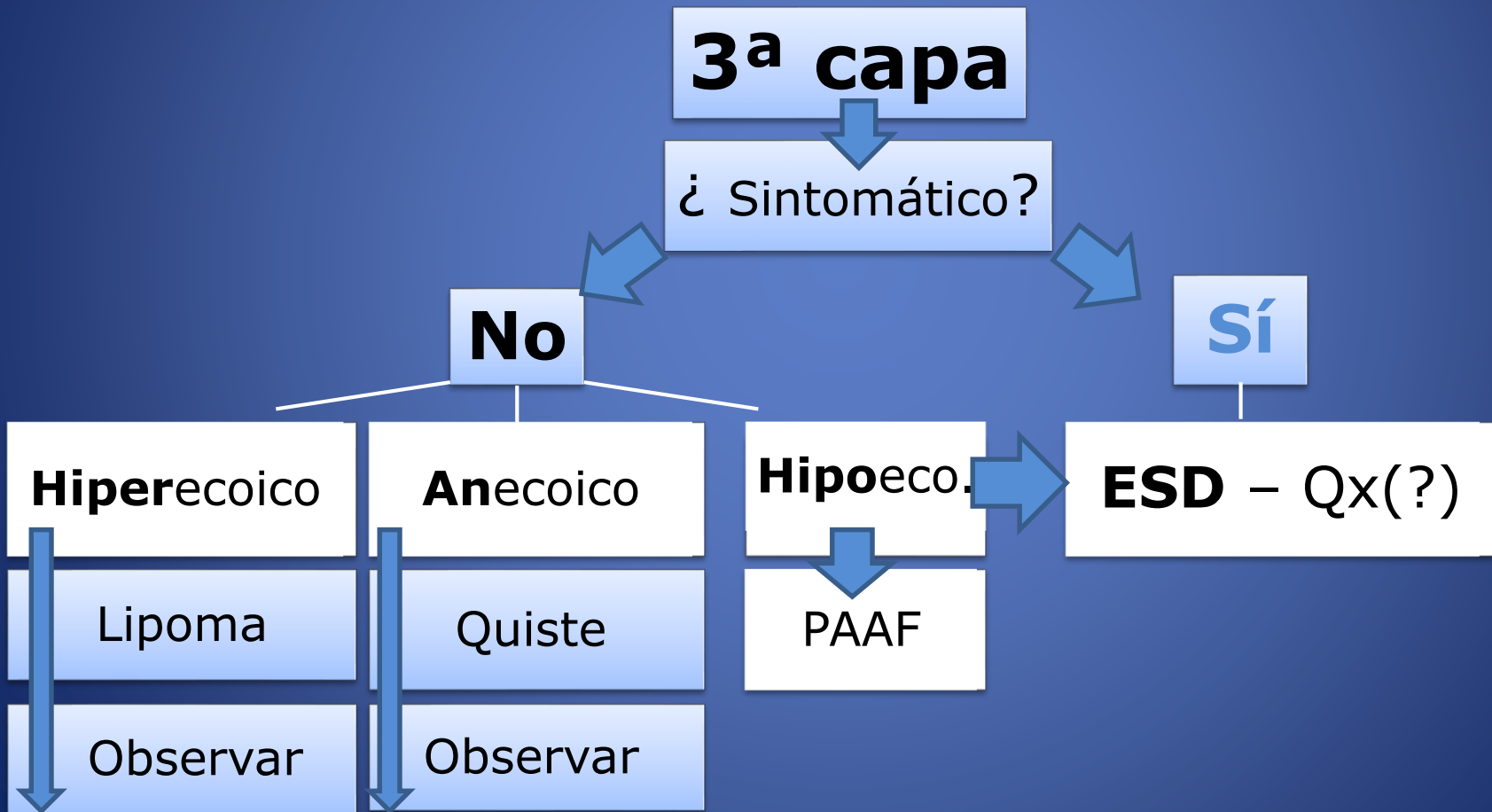
2 USE: Valorar según capa



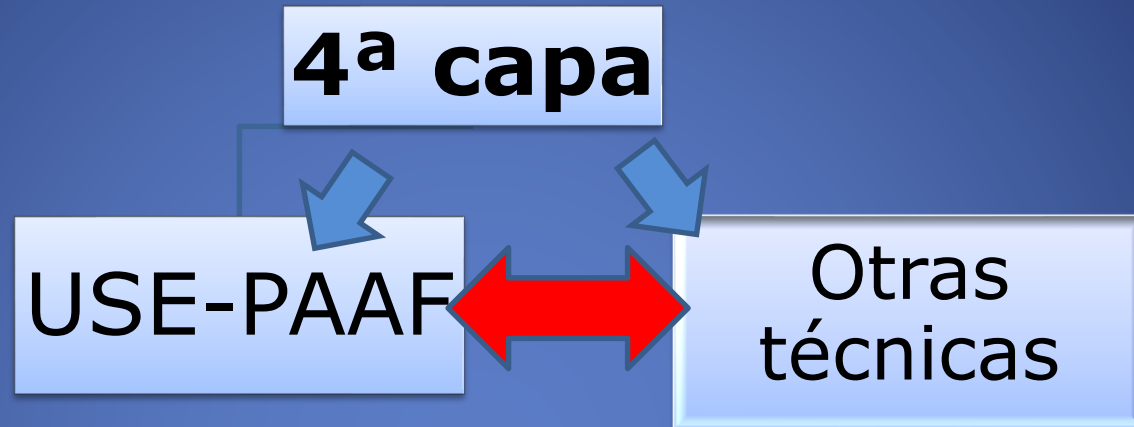
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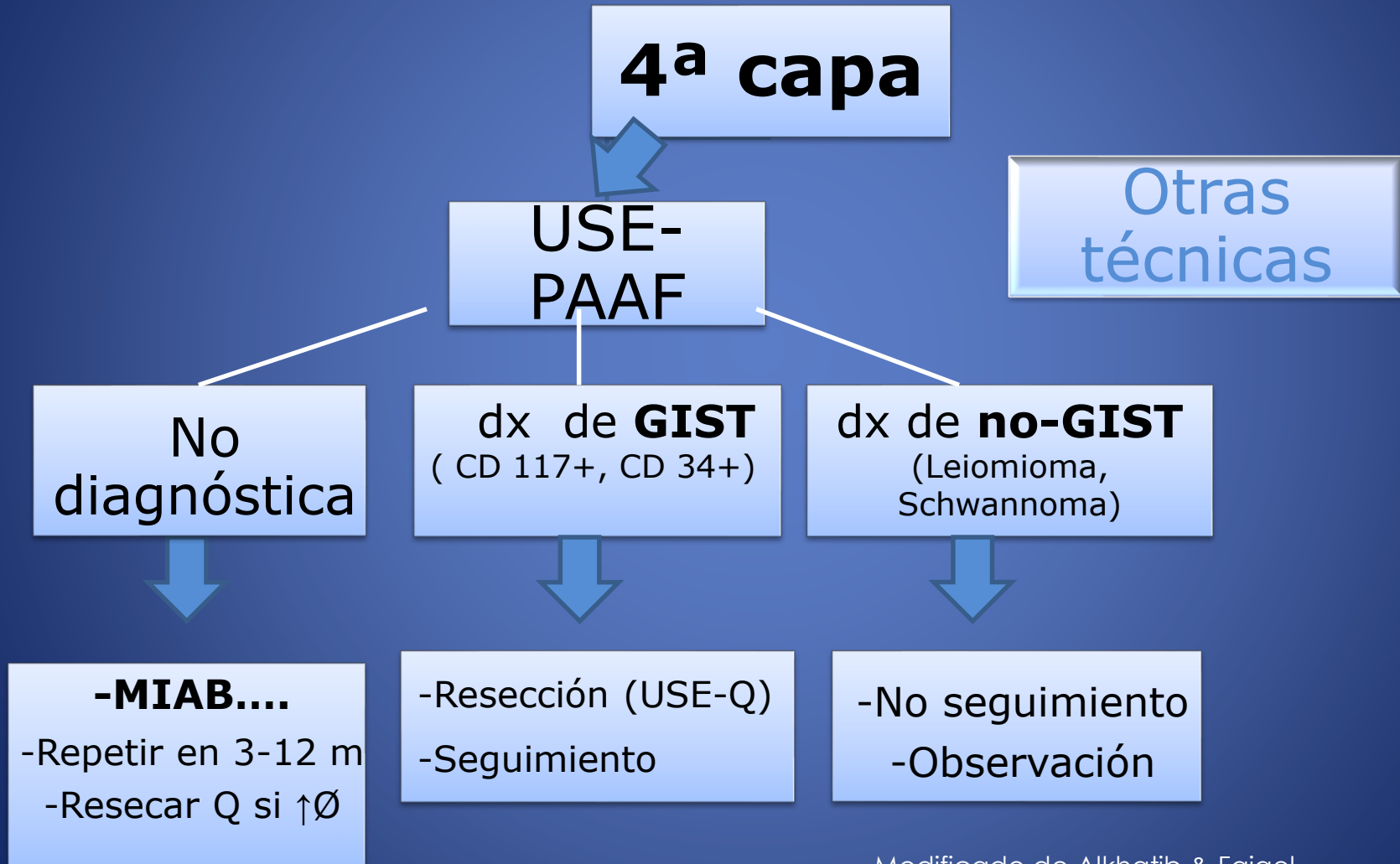
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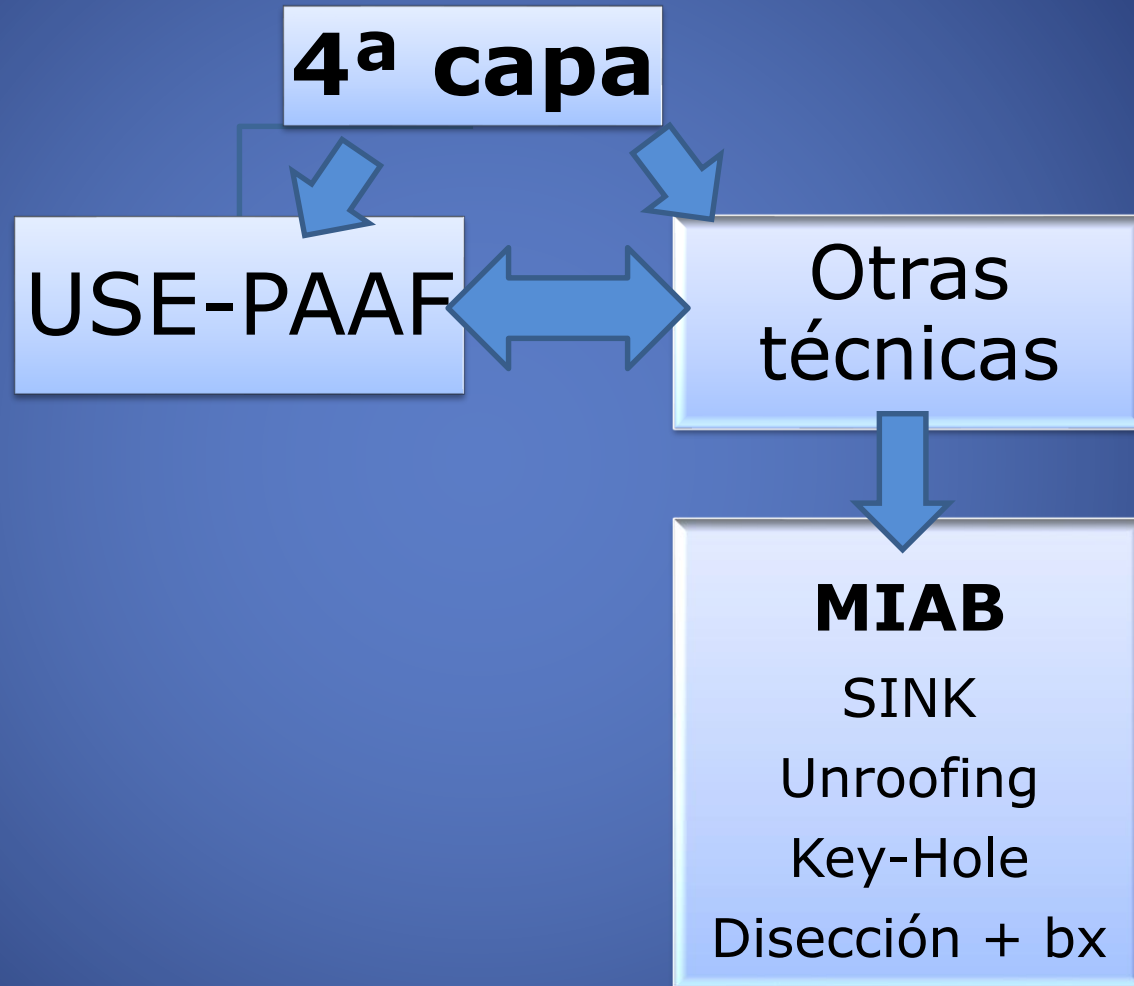
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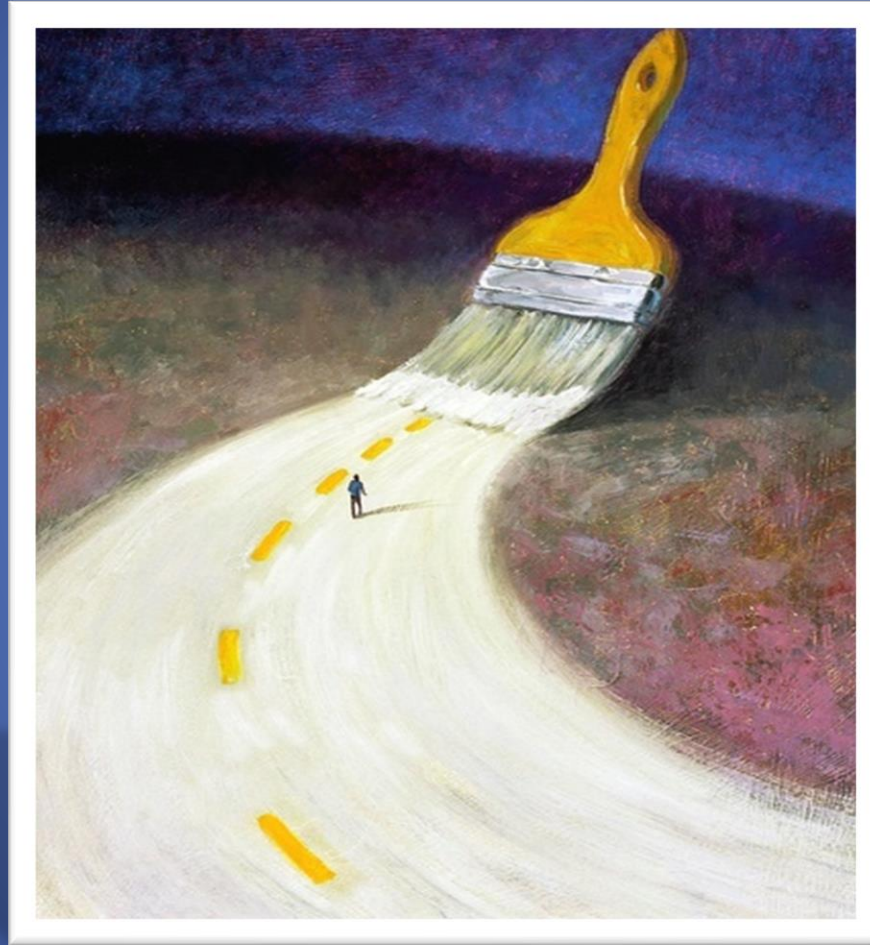
2 USE: Valorar según capa



2 USE: Valorar según capa



Futuro



IA: ¿ Un futuro sin diagnóstico **AP** ?

Inteligencia artificial (AI) en el estudio de los TSE

Application of artificial intelligence in the diagnosis of subepithelial lesions using endoscopic ultrasonography: a systematic review and meta-analysis

Xin-Yuan Liu, Wen Song, Tao Mao, Qi Zhang, Cuiping Zhang and Xiao-Yu Li*

Department of Gastroenterology, The Affiliated Hospital of Qingdao University, Qingdao, China



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AI-aided EUS was superior to EUS by experts in terms of sensitivity (0.93 vs. 0.71), specificity (0.81 vs. 0.69), and AUC (0.94 vs. 0.75). In conclusion, AI-assisted EUS is a promising and reliable method for distinguishing SELs, with excellent diagnostic performance. More multicenter cohort and prospective studies are expected to be conducted to further develop AI-assisted real-time diagnostic systems and validate the superiority of AI systems.

USE-TSEs : **conclusiones**

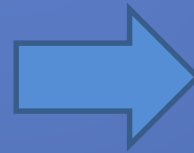
- Obtener **máximo rendimiento** de :
 - Criterios de imagen
 - Técnicas cito/histológicas

USE-TSEs : **conclusiones**

- Obtener **máximo rendimiento** de :

Criterios de imagen

Técnicas histológicas



Evitar
seguimientos!!

Caracterizar **GIST**

Decidir tratamiento

USE-TSEs : **conclusiones**

- Obtener máximo rendimiento de :
 - Criterios de imagen
 - Técnicas cito/histológicas
- **Individualizar:**
 - Tipo de lesión/paciente/.....endoscopista!!!

muchas gracias !



Pasaje de Gutiérrez, Valladolid, S XIX