



UNIVERSIDAD  
SAN SEBASTIAN

Controversias en endoscopia: Prevención en sangrado post polipectomía

# Resección caliente con clips

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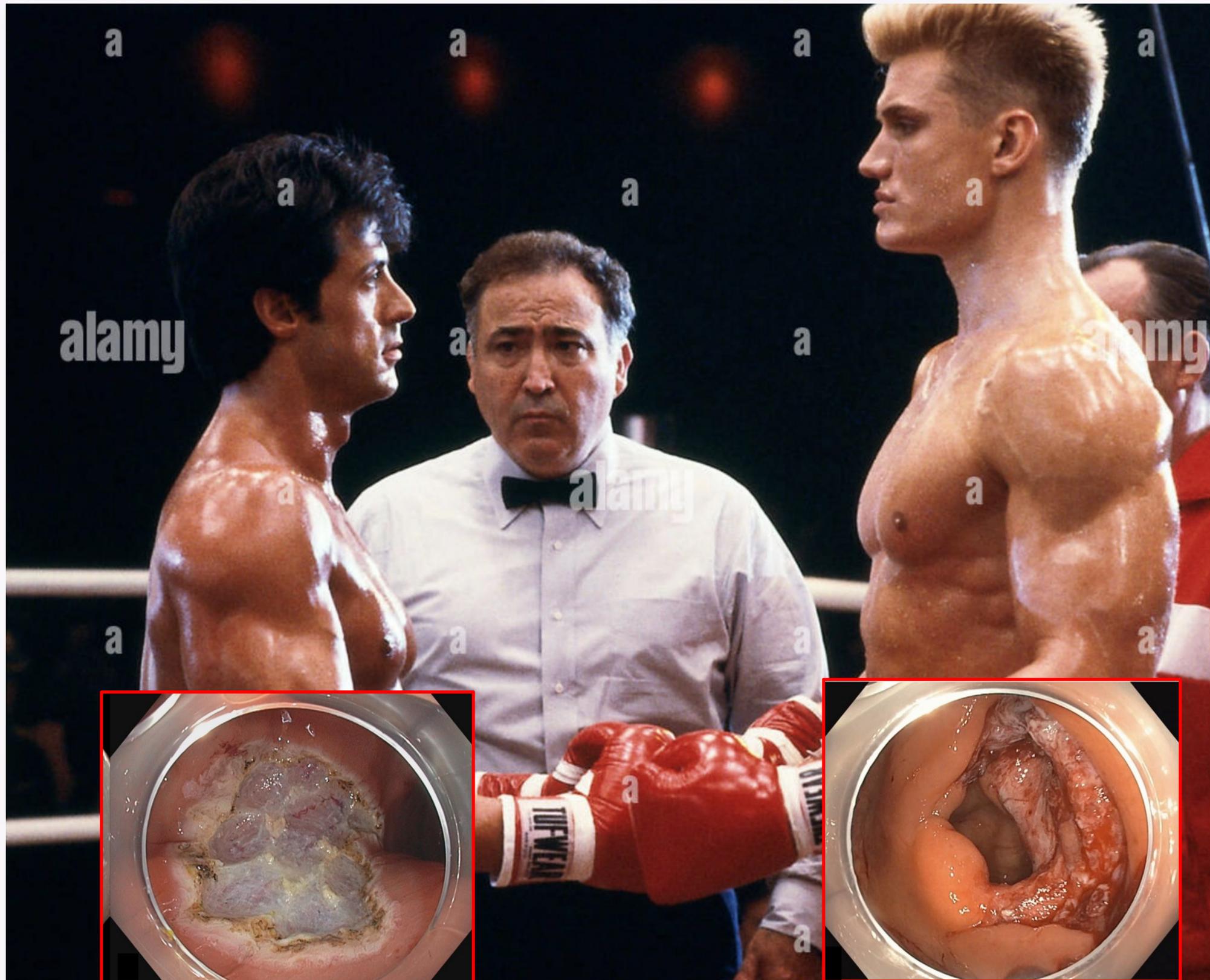
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Gastroenterología  
Endoscopia avanzada



**CURSO DE AVANCES  
EN GASTROENTEROLOGÍA**  
PERSPECTIVAS FUTURAS EN GASTROENTEROLOGÍA

17 - 19 Julio 2024 - Hotel InterContinental, Stgo.

SChGE



# INTRODUCCIÓN

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- Complicaciones de la polipectomía
  - Sangrado: 2,6/1000
  - Perforación: 0,5/1000
  - Síndrome postpolipectomía: 1 %
- El sangrado post polipectomía (SPP)
  - Inmediato
  - Tardío → Dentro de 14 días
- Guías ASGE recomiendan que SPP sea <1/100

# Factores de riesgo SPP

- Tamaño del pólipo
- Pólipo pediculado de tallo grueso
- Síndromes polipósicos
- Pólipo de colon derecho
- Edad del paciente  $\geq 65$  años
- Enfermedad cardiovascular o renal crónica
- Fármacos
  - Warfarina, NACO, AAS, AINEs, antagonistas del receptor P2Y12, Inhibidores de GPIIb/IIIa y PAR-1, heparina

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**La instalación profiláctica de hemoclips después de la polipectomía se ha convertido en una práctica común para la prevención de SPP pero aumenta los costos totales**

# PÓLIPOS DE COLON



PEDICULADOS

NO PEDICULADOS

PÓLIPOS DIMINUTOS  
 $\leq 5$  mm

POLIPOS PEQUEÑOS  
6-9 mm

PÓLIPOS 10-20 mm

PÓLIPOS  $\geq 20$  mm

# Pólipos no pediculados < 10 mm.

ORIGINAL ARTICLE

A comparison of the resection rate for cold and hot snare polypectomy for 4–9 mm colorectal polyps: a multicentre randomised controlled trial (CRESCENT study)

Gut 2018;67:1950-1957

- RCT 12 centros en Japón
- Asa fría: 394 pólipos
- Asa caliente: 402 pólipos
- SPP inmediato fue mayor cuando se usó asa fría versus asa caliente (7,1% versus 3,5%,  $p=0,057$ )
- Desventajas
  - No se evalúa uso de hemoclips.
  - Endpoint secundario

Annals of Internal Medicine

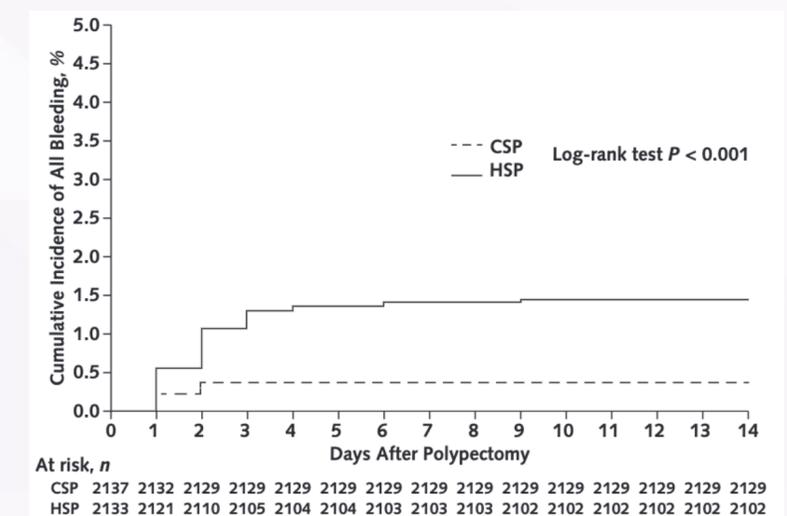
## Cold Versus Hot Snare Polypectomy for Small Colorectal Polyps

A Pragmatic Randomized Controlled Trial

Ann Intern Med. 2023;176:311-319

ORIGINAL RESEARCH

- RCT 6 centros en Taiwán
- Asa fría: 2133 pólipos
- Asa caliente: 2137 pólipos
- SPP tardío
  - Asa fría: 1-2 días
  - Asa caliente: 1-9 días
- Hemoclips
  - Asa fría: 18,9%
  - Asa caliente: 27,6%



# Pólipos no pediculados 10 – 19 mm.

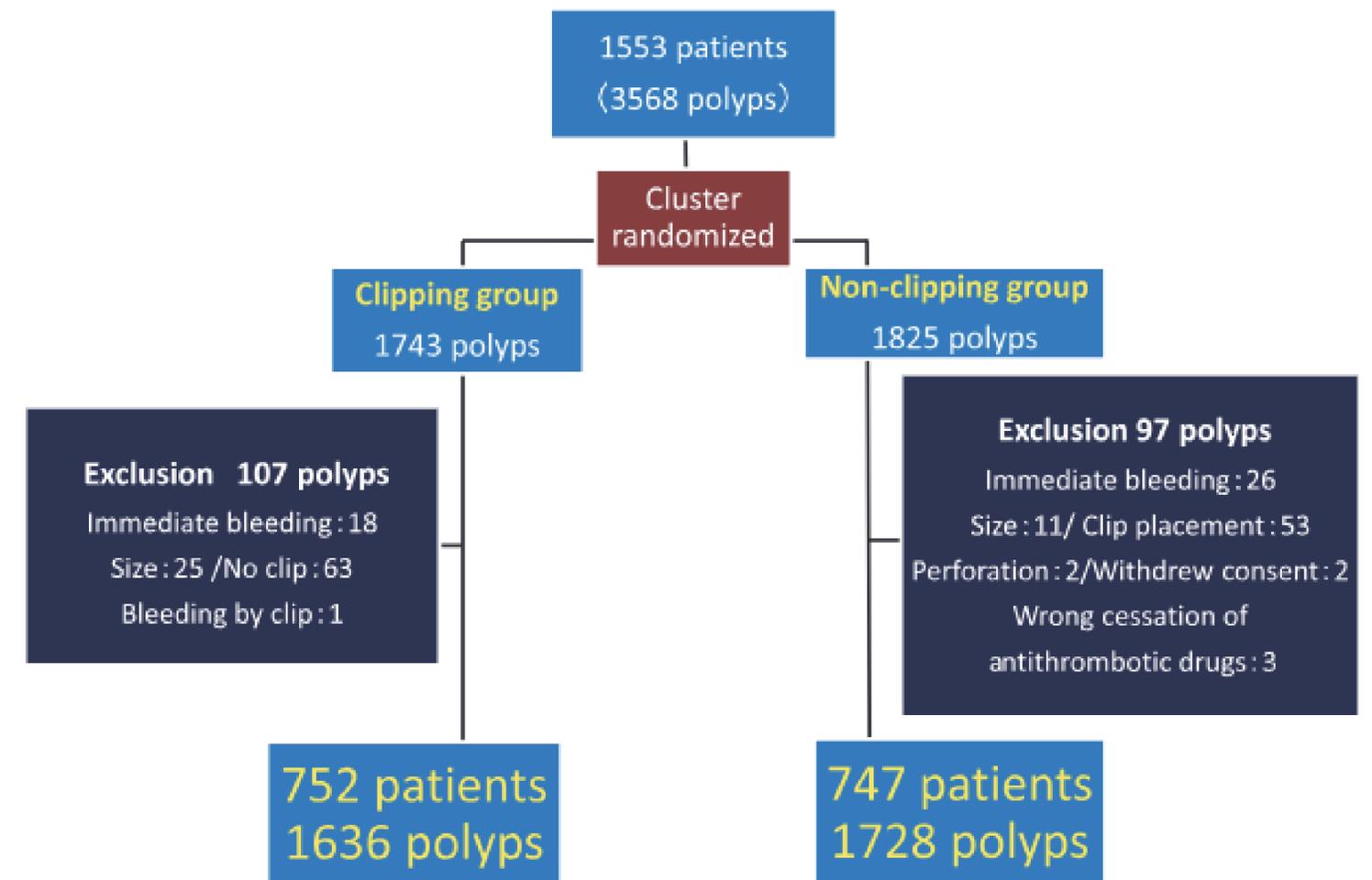
*Digestive Endoscopy* 2016; 28: 570–576

doi: 10.1111/den.12661

## Original Article

Multicenter randomized controlled study to assess the effect of prophylactic clipping on post-polypectomy delayed bleeding

- Japón
- Estudio multicéntrico
- Pacientes con pólipos < 20 mm.
- Compararon SPP en pacientes con y sin hemoclips profilácticos
- Definieron SPP tardío como aparición de deposiciones sanguinolentas y/o disminución de los niveles de hemoglobina  $\geq 2$  mg/dL.
- Se realizó colonoscopia de urgencia para identificar el sitio de sangrado
- Control 14 días posterior a SPP
- Se incluyeron variables dependientes del paciente, del operador y de la configuración del equipo electroquirúrgico.



**Table 2** Bleeding cases in each group

|                                      | Clipping group (n = 18)  |    | Non-clipping group (n = 15)  |    | P- value <sup>†</sup> |
|--------------------------------------|--|----|--|----|-----------------------|
| Mean size (mm)                       | 10.7 (± 5.5)   |    | 9.6 (± 5.3)  |    | 0.55                  |
| Location                             | Distal   | 7  | Distal   | 10 | 0.11                  |
|                                      | Proximal   | 11 | Proximal   | 5  |                       |
| Morphological type                   | Protruded type   | 17 | Protruded type   | 13 | 0.43                  |
|                                      | Sessile type   | 1  | Sessile type   | 2  |                       |
| No. days of bleeding                 | 3.89 ± 2.49  |    | 3.20 ± 3.10  |    | 0.48                  |
| No. patients on antithrombotic drugs | 0  | 12 | 0  | 11 | 0.67                  |
|                                      | 1  | 6  | 1  | 4  |                       |
| Outcome                              | BTF: 1 patient (Hb 9.8)<br>All cases could be managed<br>by endoscopic hemostasis. |    | BTF: none<br>All cases could be managed<br>by endoscopic hemostasis. |    |                       |

**Table 3** Risk factors for post-bleeding in both groups

|   | Bleeding polyp<br>(n = 25 patients,<br>33 polyps) |    | Non-bleeding polyp<br>(n = 1473 patients,<br>3331 polyps) |      | P-value<br>(univariate<br>analysis) <sup>†</sup> | P-value<br>(multivariate<br>analysis) <sup>‡</sup> |
|---|---|----|---|------|--|--|
| Antithrombotic drugs<br>(Use : Non-use) | 7:18  |    | 309:1164  |      | 0.70   |  |
| Mean size (mm)                          | 10.21 ± 5.35                                      |    | 6.63 ± 3.65   |      | <0.01  | <0.01 <sup>§</sup>                                 |
| Location                                | Distal  | 17 | Distal  | 1679 | 0.89   |  |
|   | Proximal  | 16 | Proximal  | 1652 |  |  |
| Morphological type                      | Protruded type                                    | 30 | Protruded type  | 3032 | 0.98   |  |
|   | Sessile type                                      | 3  | Sessile type  | 299  |  |  |
| Additional coagulation                  | Yes   | 5  | Yes   | 139  | 0.01   | 0.04   |
|   | No  | 28 | No  | 3192 |  |  |
| Experience of endoscopist               | <10 years   | 23 | <10 years   | 1657 | 0.02   | 0.12   |
|   | >10 years (unknown 1)                             | 9  | >10 years (unknown 121)                                   | 1553 |  |  |

Original Article

# Multicenter randomized controlled study to assess the effect of prophylactic clipping on post-polypectomy delayed bleeding

**El uso de hemoclips profilácticos no previene el SPP en pólipos < 20 mm.**

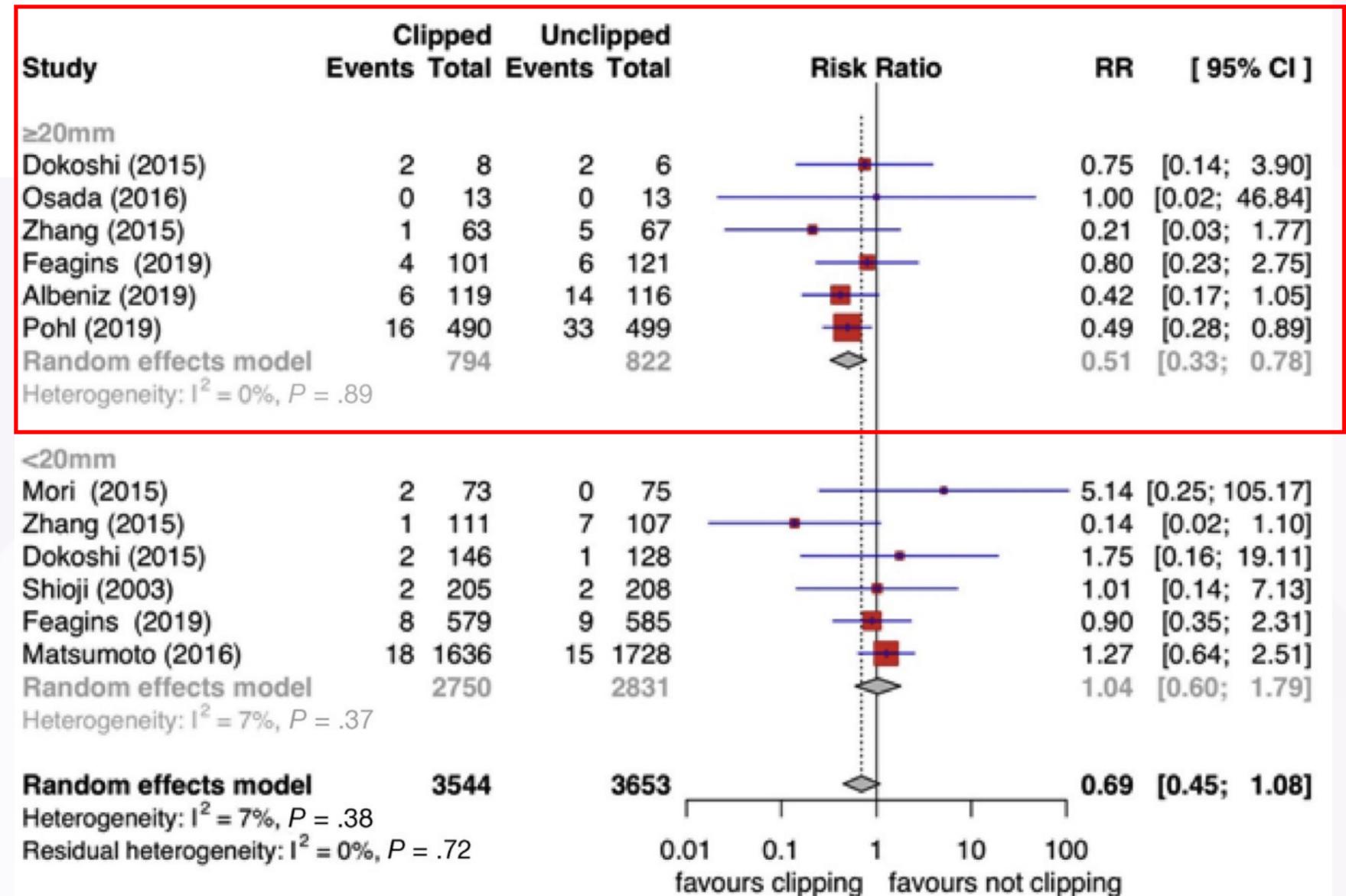


# Pólipos no pediculados $\geq 20$ mm.

Gastroenterology 2020;159:148-158

## Prophylactic Clipping After Colorectal Endoscopic Resection Prevents Bleeding of Large, Proximal Polyps: Meta-analysis of Randomized Trials

- 9 RCT  $\rightarrow$  72.000 pólipos (22,5%  $\geq 20$  mm.)
- SPP  $\rightarrow$  2,2% con uso de clips versus 3,3% sin uso de clips.
- Subgrupo pólipos  $\geq 20$  mm.
  - Uso de clip disminuyó SPP (RR: 0,51 [IC 0,33 – 0,78])



# Pólipos no pediculados $\geq 20$ mm.

Clinical Gastroenterology and Hepatology 2022;20:362–371

## The Role of Clips in Preventing Delayed Bleeding After Colorectal Polyp Resection: An Individual Patient Data Meta-Analysis

- 13 estudios  $\rightarrow$  8229 pólipos
  - 37,9%  $\geq 20$  mm.
  - 40,2% con clips profilácticos



**Table 2.** Effect of Prophylactic Clipping on Delayed Bleeding in Different Subgroups

| Subgroup (n in adjusted model)                         | AR, % | Crude OR (95% CI) | P value | Adjusted OR (95% CI) <sup>a</sup> | P value            |
|--|-------|-------------------|---------|-----------------------------------|--------------------|
| Whole cohort (n = 8229)                                | 2.3   | 0.94 (0.69–1.28)  | .69     | 0.94 (0.76–1.17)                  | .59                |
| Large polyps $\geq 20$ mm (n = 3200)                   | 4.8   | 0.83 (0.62–1.11)  | .21     | 0.77 (0.57–1.04)                  | .09                |
| Proximal polyps (n = 2268)                             | 5.1   | 0.67 (0.48–0.94)  | .02     | 0.63 (0.44–0.89)                  | < .01 <sup>c</sup> |
| With complete closure <sup>b</sup> (n = 1490)          | 2.5   | 0.61 (0.37–0.99)  | < .05   | 0.60 (0.36–0.99)                  | .04 <sup>d</sup>   |
| On antithrombotics (n = 721)                           | 8.6   | 0.62 (0.37–1.05)  | .08     | 0.59 (0.35–0.99)                  | < .05 <sup>e</sup> |
| Single platelet inhibitors (n = 480)                   | 6.8   | 0.69 (0.35–1.38)  | .29     | 0.62 (0.29–1.36)                  | .24 <sup>f</sup>   |
| On anticoagulants/double platelet inhibition (n = 226) | 11.1  | 0.44 (0.17–1.11)  | .08     | 0.40 (0.16–1.01)                  | .05 <sup>g</sup>   |
| Without antithrombotics (n = 1560)                     | 3.8   | 0.69 (0.44–1.10)  | .12     | 0.65 (0.41–1.04)                  | .07 <sup>h</sup>   |
| Distal polyps (n = 919)                                | 3.9   | 1.46 (0.82–2.61)  | .20     | 1.41 (0.79–2.52)                  | .24                |
| With complete closure <sup>b</sup> (n = 633)           | 5.5   | 1.32 (0.52–3.33)  | .56     | 1.15 (0.45–2.94)                  | .77                |
| On antithrombotics (n = 229)                           | 7.9   | 1.55 (0.60–3.99)  | .36     | 1.32 (0.51–3.41)                  | .57                |
| Small polyps <20 mm (n = 5030)                         | 0.7   | 1.09 (0.80–1.48)  | .58     | 1.05 (0.76–1.44)                  | .78                |
| On antithrombotics (n = 1416)                          | 0.8   | 1.15 (0.64–2.08)  | .64     | 1.04 (0.56–1.92)                  | .90                |

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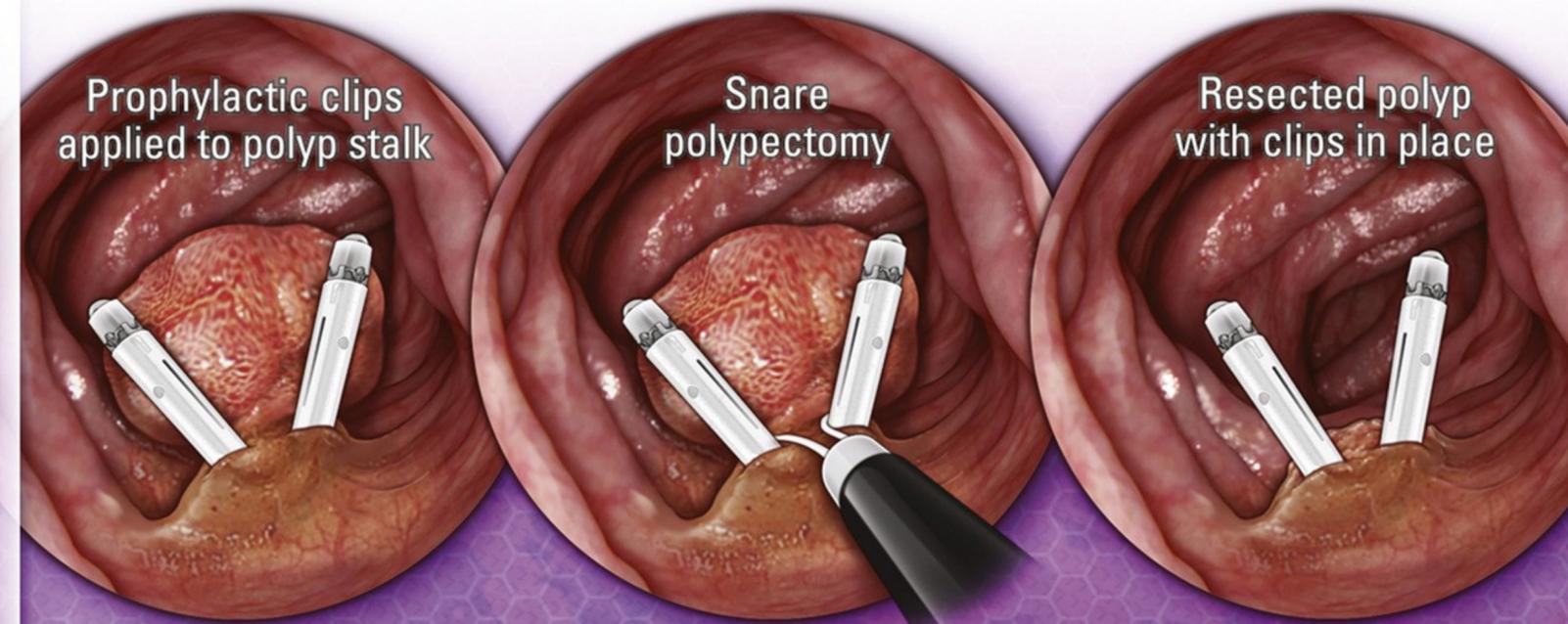
# Effect of prophylactic clip application for the prevention of postpolypectomy bleeding of large pedunculated colonic polyps: a randomized controlled trial CME

Gastrointest Endosc. 2021 Jul;94(1):148-154.

## Outcomes of Snare Polypectomy

|                           | Clip<br>N=119 | Control<br>N=119 | P value |
|---------------------------|---------------|------------------|---------|
| Overall bleeding, n (%)   | 5 (4.2)       | 15 (12.6)        | 0.033*  |
| Immediate bleeding, n (%) | 3 (2.5)       | 13 (10.9)        | 0.017*  |
| Grade 1, n (%)            | 1 (0.8)       | 7 (5.9)          | 0.066   |
| Grade 2, n (%)            | 2 (1.7)       | 6 (5.0)          | 0.281   |
| Delayed bleeding, n (%)   | 2 (1.6)       | 2 (1.6)          | 1.0000  |

\* Statistically significant



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# CLINICAL PRACTICE UPDATES

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## AGA Clinical Practice Update on Appropriate and Tailored Polypectomy: Expert Review

### **PÓLIPOS NO PEDICULADOS**

- No usar hemoclips profilácticos en lesiones menores de 20 mm. como prevención de SPP

### **PÓLIPOS PEDICULADOS**

- Uso de asa caliente en pólipos  $\geq 10$  mm. con base  $\geq 5$  mm.
- Prevención SPP en pólipos con cabeza  $\geq 20$  mm. y/o base  $\geq 5$  mm.  $\rightarrow$  epinefrina, clips, endoloop



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**SAVE THE DATE**

**ABRIL 2025**

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SCHGE**

**LOS ESPERAMOS!!!!**



SEDE  
VALDIVIA



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