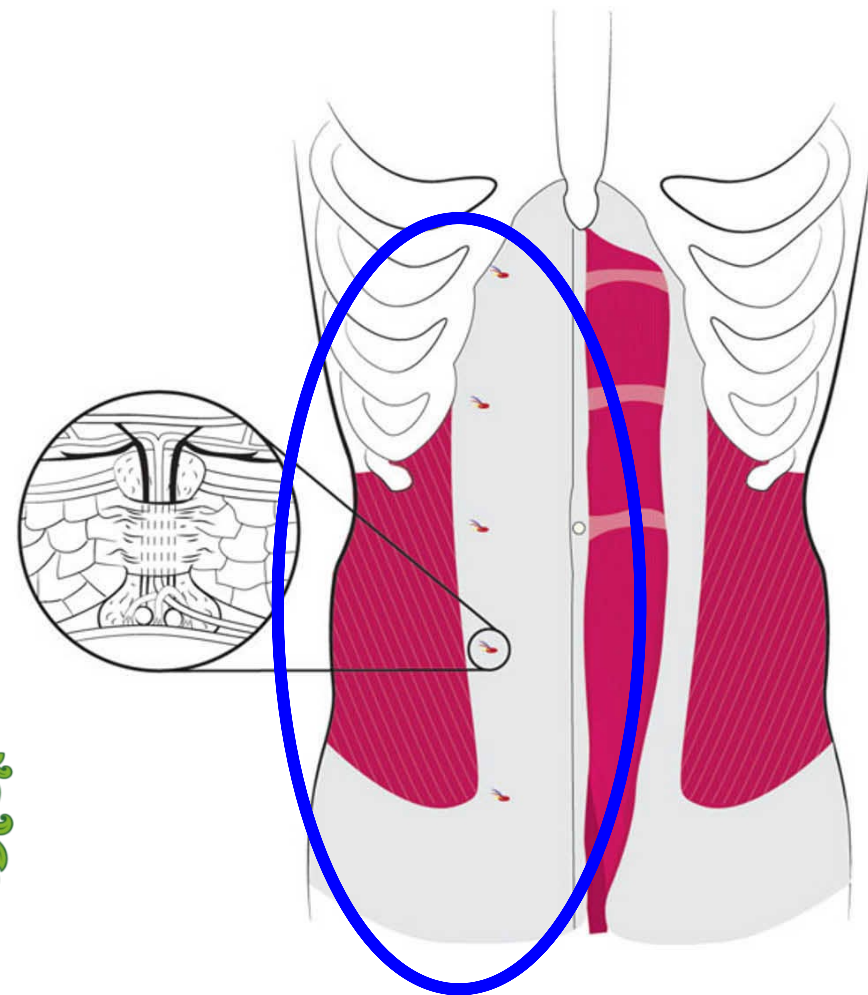
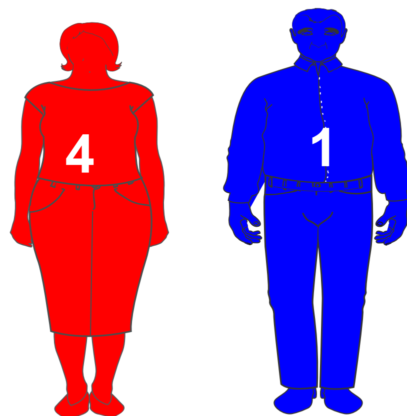
XXII Convención Internacional de Gastroenterología
Noviembre 18,19 2022 AGAN

Dolor de la pared abdominal



William Otero R MD, FAGA, FASGE, FACP
Profesor Titular de Medicina,
Universidad Nacional de Colombia
Hospital Universitario Nacional de Colombia

Dolor de la pared abdominal



30-50 años
2% Urgencias
30% Dolor abdominal crónico

Sweester S, Mayo Clin Proc 2019;94:347-85
Glissen Brown JR,J Clin Gastroenterol 2016;50:828–35.

48 % Universidad Nacional de Colombia

Otero W, Rev Col Gastroenterol 2007;22:261-71

Less common causes of abdominal pain

Less common causes of abdominal pain
Abdominal aortic aneurysm
Abdominal compartment syndrome
Abdominal migraine
Acute hepatic porphyrias (eg, acute intermittent porphyria)
Angioedema (either hereditary or angiotensin-converting enzyme [ACE] inhibitor-related)
Celiac artery compression syndrome
Chronic abdominal wall pain
Colonic pseudo-obstruction (acute or chronic)
Eosinophilic gastroenteritis
Epiploic appendagitis
Familial Mediterranean fever
Helminthic infections
Herpes zoster
Hypercalcemia
Hypothyroidism
Lead poisoning
Meckel's diverticulum
Narcotic bowel syndrome
Paroxysmal nocturnal hemoglobinuria
Pseudoappendicitis
Pulmonary etiologies
Rectus sheath hematoma
Renal infarction
Rib pain
Sclerosing mesenteritis
Somatization
Wandering spleen

??

Up Date 2022

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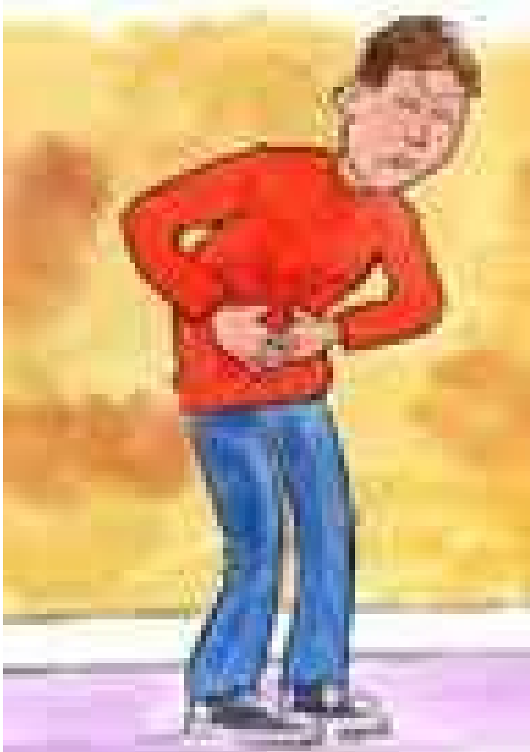
Dolor Abdominal crónico

Múltiples causas

Desafío
MD cuidado primario
MD especialista
Equipos médicos
Hospitales referencia



Pajanen H. Surg Endosc 2006;20:1835-8

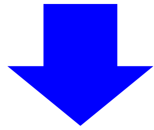
Dolor abdominal crónico en gastroenterología

50%

Idiopáticos

Sparkes V, Eur J Gastroenterol Hepatol 2003;15:1021-7

10-90%



Estructuras de la pared abdominal

Dolor abdominal crónico de la pared abdominal

Srinisvasan R, Am J Gastroenterol 2002;97:824-30

Dolor pared abdominal

Estructuras de la pared abdominal

<u>Atrapamiento nervio cutáneo anterior</u>

Lesiones quirúrgicas
Hernias pared abdominal
Hematomas/lipomas
Dolor miofascial

Dolor abdominal referido

Cartílago xifoides
Costilla flotante

Dolor radicular

Herpes Zoster
Radiculopatía diabética

Srinisvasan R, Am J Gastroenterol 2002;97:824-30
De Andrés J, Rev Soc Esp Dolor 2006;3:173-83

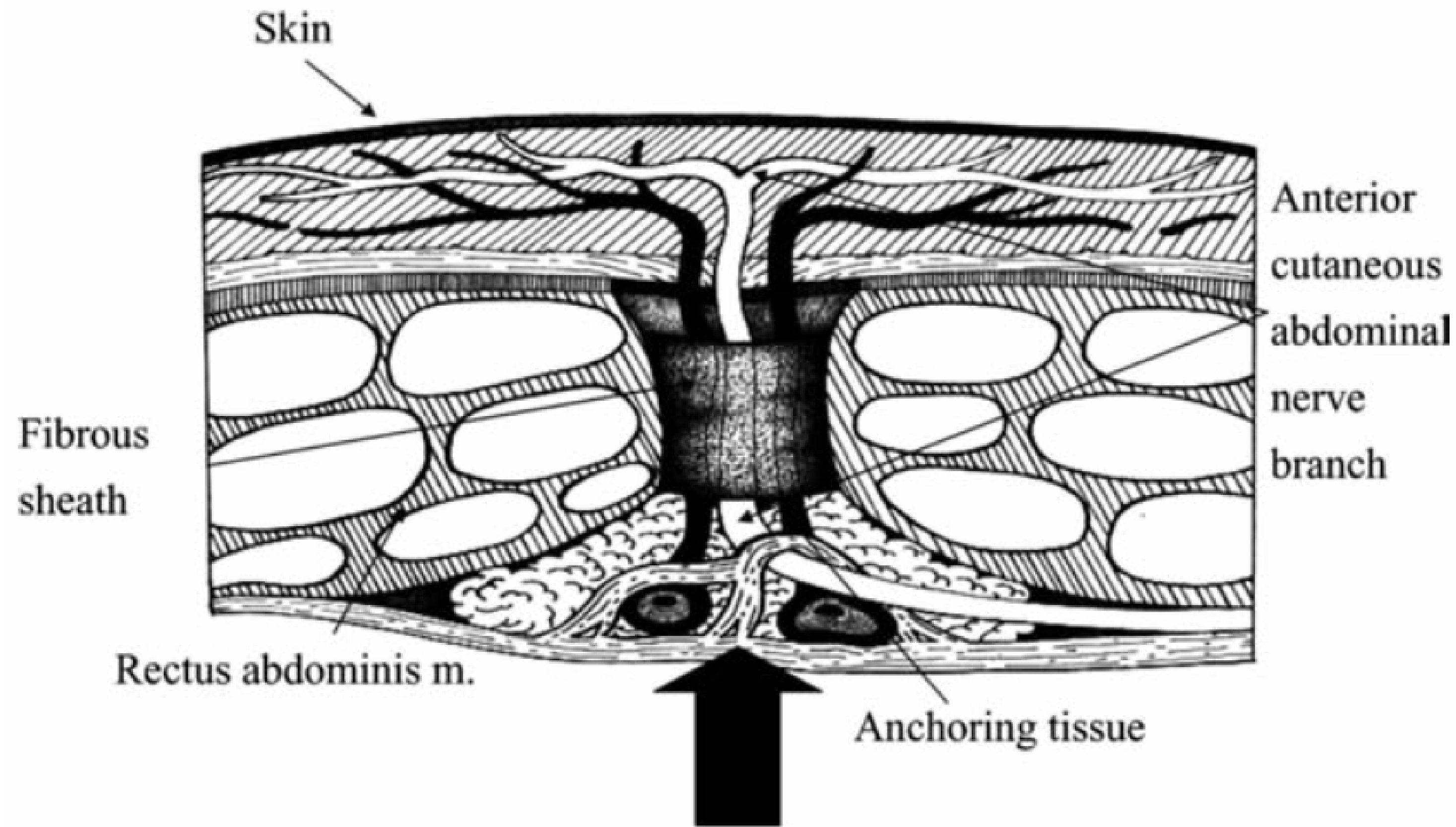
Compromiso del nervio cutàneo anterior

"Sindrome de atrapamiento nervioso Cutáneo abdominal"

ACNES: *"abdominal cutaneus nerve Entrapment syndrome"*

Metha M, Anaesthesia 1971;26:791-2
Applegate WV. Am Fam Physician 1973;8:132-3

Rama cutánea anterior, Nervios Intercostales T7-T12



Aumento presión intraabdominal

Aumento de presión en pared
Ropa, cinturones obesidad

Greebaum DS, Dig Dis Sci 1994;39:1935-41

Características clínicas del DACPA

Diario, agudo, crónico
Continuo o intermitente
Puede coexistir en varios sitios
Se intensifica con distensión abdominal
No asociado a Menstruación
Ingesta alimentos?,
Deposición?

Agravan los síntomas
Toser, reír, obesidad

Srinivasan R. Am J Gastroenterol 2002;97:824-30
Otero W, Rev Colomb Gastroenterol 2017; 32:75-81
Sweester S,Mayo Clin Proc 2019;94:347-55

Dolor de la pared abdominal
Un diagnóstico olvidado

Cyriax EF
Practitioner 1919;102:314-22

Carnett JB
Surg Gynecol Obstetr 1926:42:625

Dolor crónico de La pared abdominal

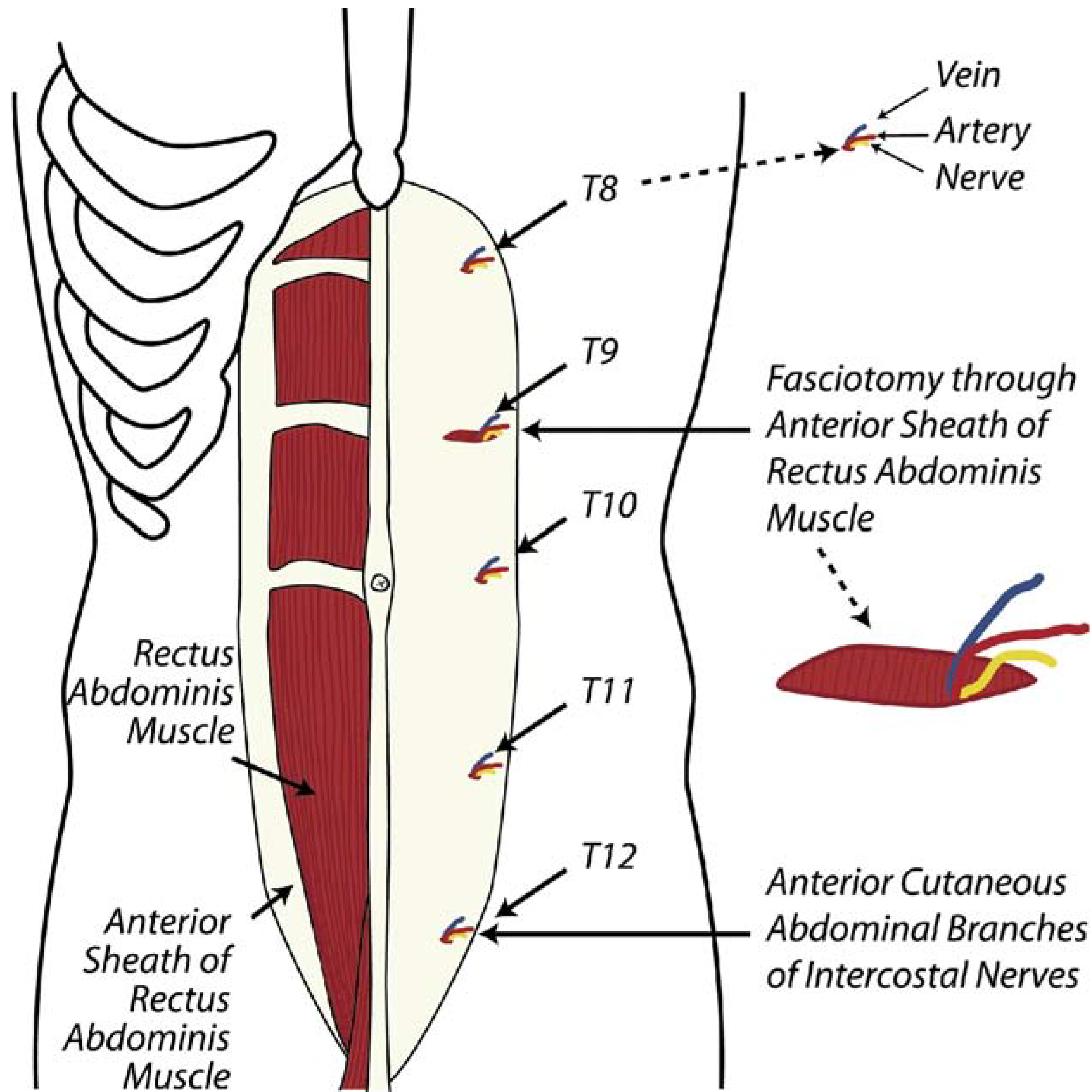
Signo de Carnett (+), A y B

Srinivasan R. Am J Gastroenterol 2002;97:824-30
Longstreth GF. NEJM 2006;354:791-3

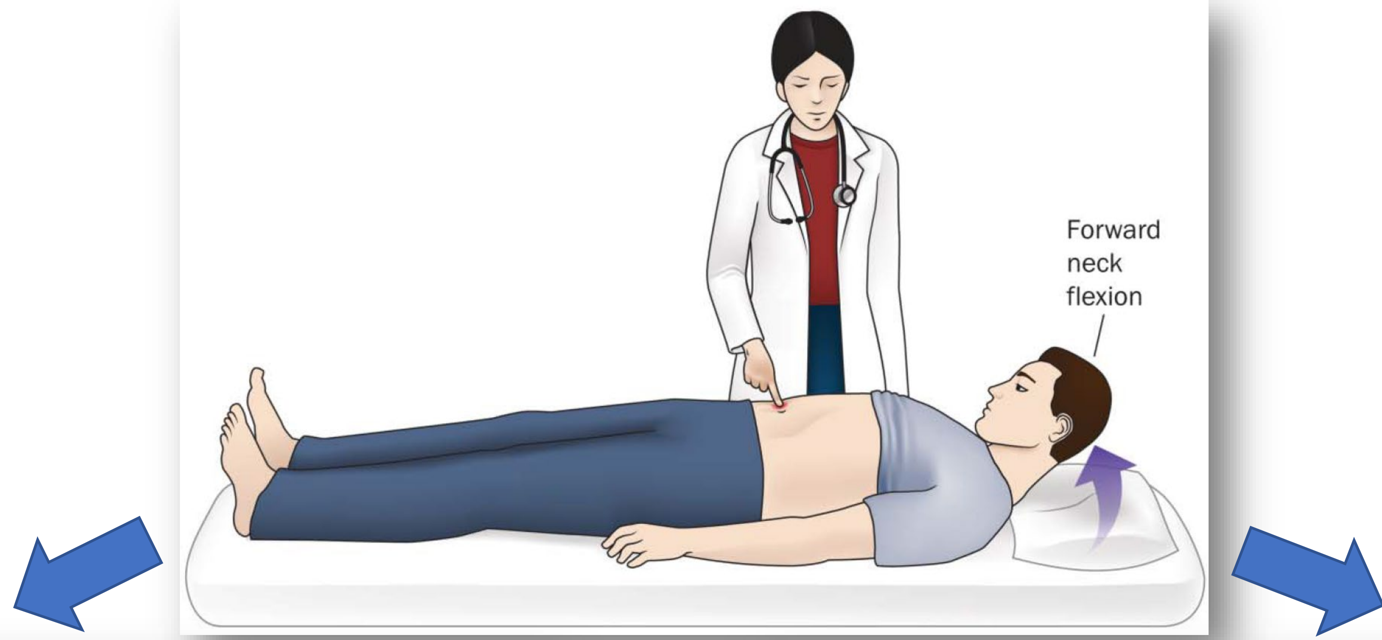
Receptores A Delta: Heridas superficiales Traumatismos, Dolor parietal

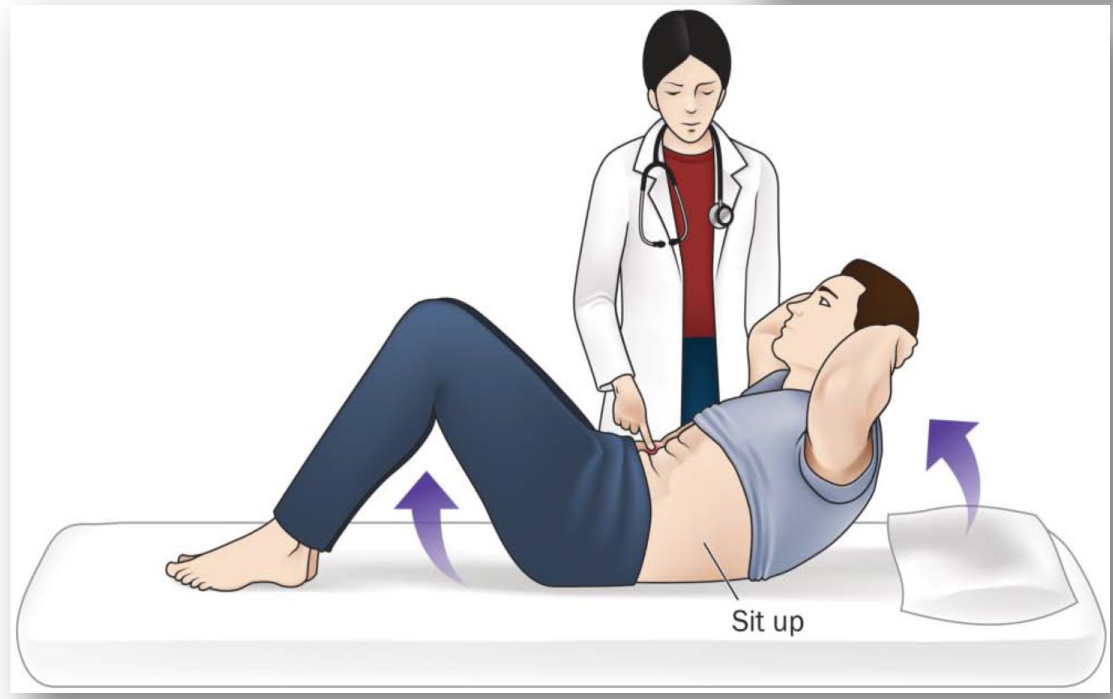
Srinisvasan R, Am J Gastroenterol 2002;97:824-30
De Andrés J, Rev Soc Esp Dolor 2006;3:173-83

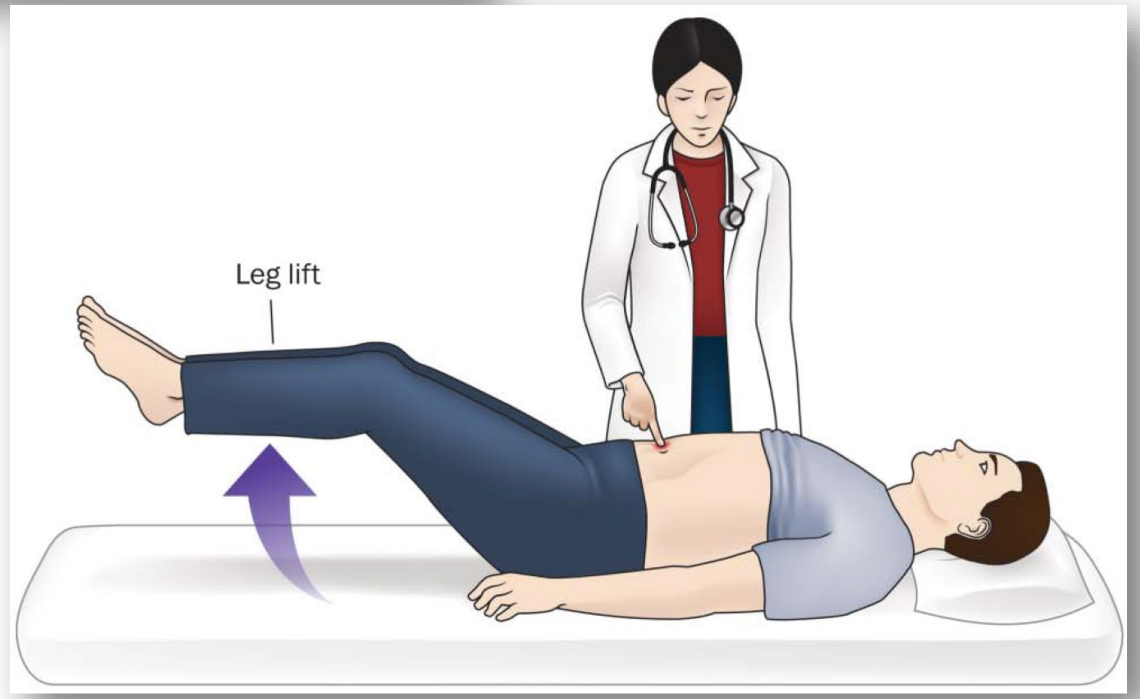
T7-T12



Lidsetmo RO, Am J Surg 2009;198: 129-134







Singla M, Am J Gastroenterol 2020;115:645-47.

TRABAJOS ORIGINALES

Dolor crónico de la pared abdominal: una entidad poco reconocida con gran impacto en la práctica médica

Chronic Abdominal Wall pain: An unrecognized entity with great impact in the clinical practice

William Otero, MD,[1] Xiomara Ruiz, MD,[2] Elder Otero, MD,[3] Martín Gómez, MD,[4] Luis Fernando Pineda, MD,[5] Víctor Arbeláez, MD.[5]

Trabajo ganador del Premio Nacional de Gastroenterología "Jacome Valderrama" 2007

48%

Otero W, Rev Col Gastroenterol 2007;22:261-71

Resultados

n=189

DACP: 91 (48%)
Edad: 49 +/-15 años, 90% mujeres
Evolución: 36 +/- 5.5 meses
(1 mes a 25 años)

- 2 años: 36 pts (39.5%)

68% alteraciones del sueño
Consultas previas: 1168

Otero W, Rev Col Gastroenterol 2007;22:261-71

Diagnósticos previos

"Gastritis crónica"	50 (55%)
"Colon irritable"	30 (33%)
"Enfermedad sicológica"	15 (16.4%)
"Divertículos"	5 (5.5%)

Otras:

Infección urinaria, ovarios, etc.

Medicamentos

Analgésicos 100% (acetaminofén, AINES, Hioscina)

IBP: 88%, Ranitidina 55%

Amitriptilina: 5.5%

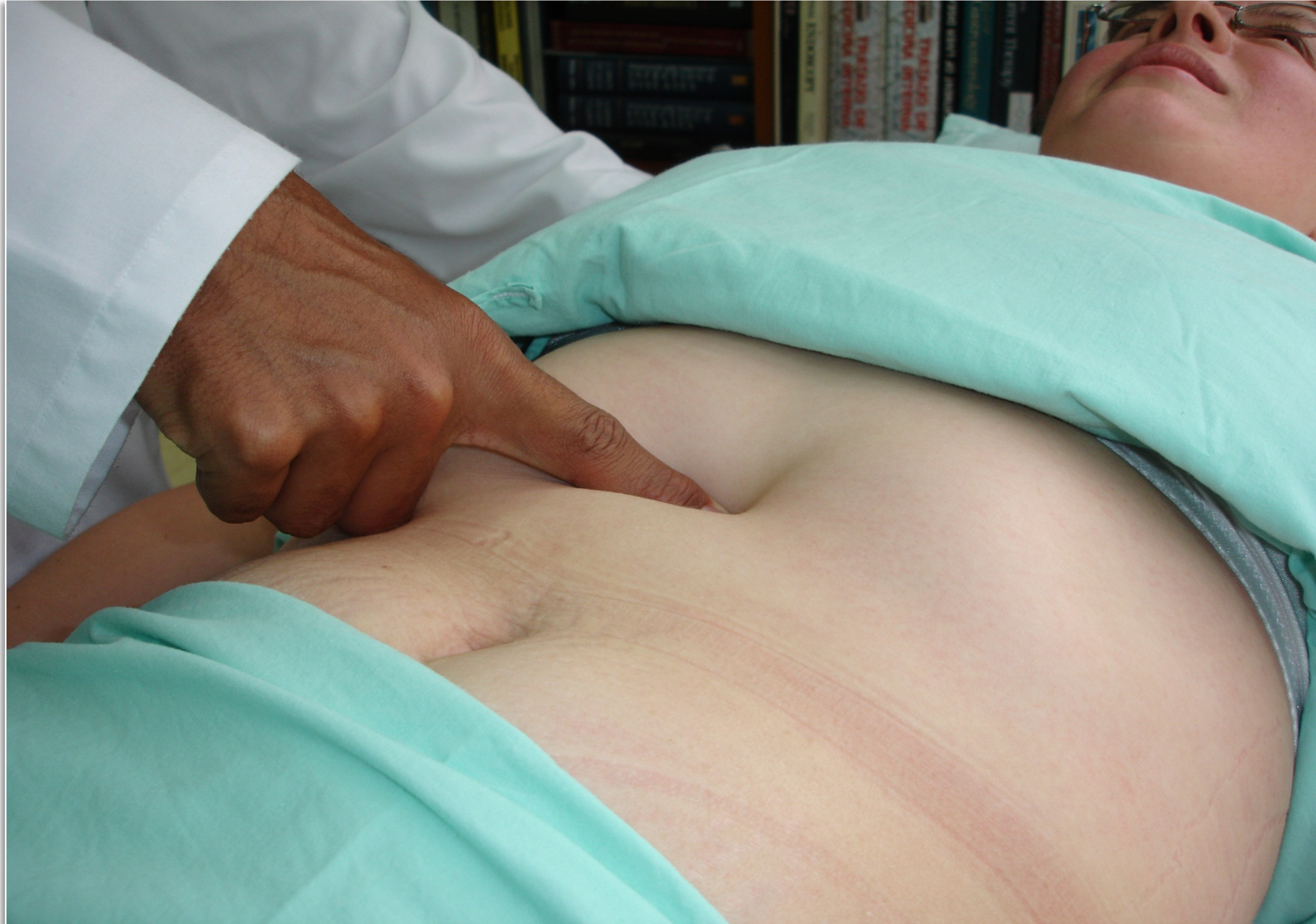
Otero W, Rev Col Gastroenterol 2007;22:261-71

Exámenes previos

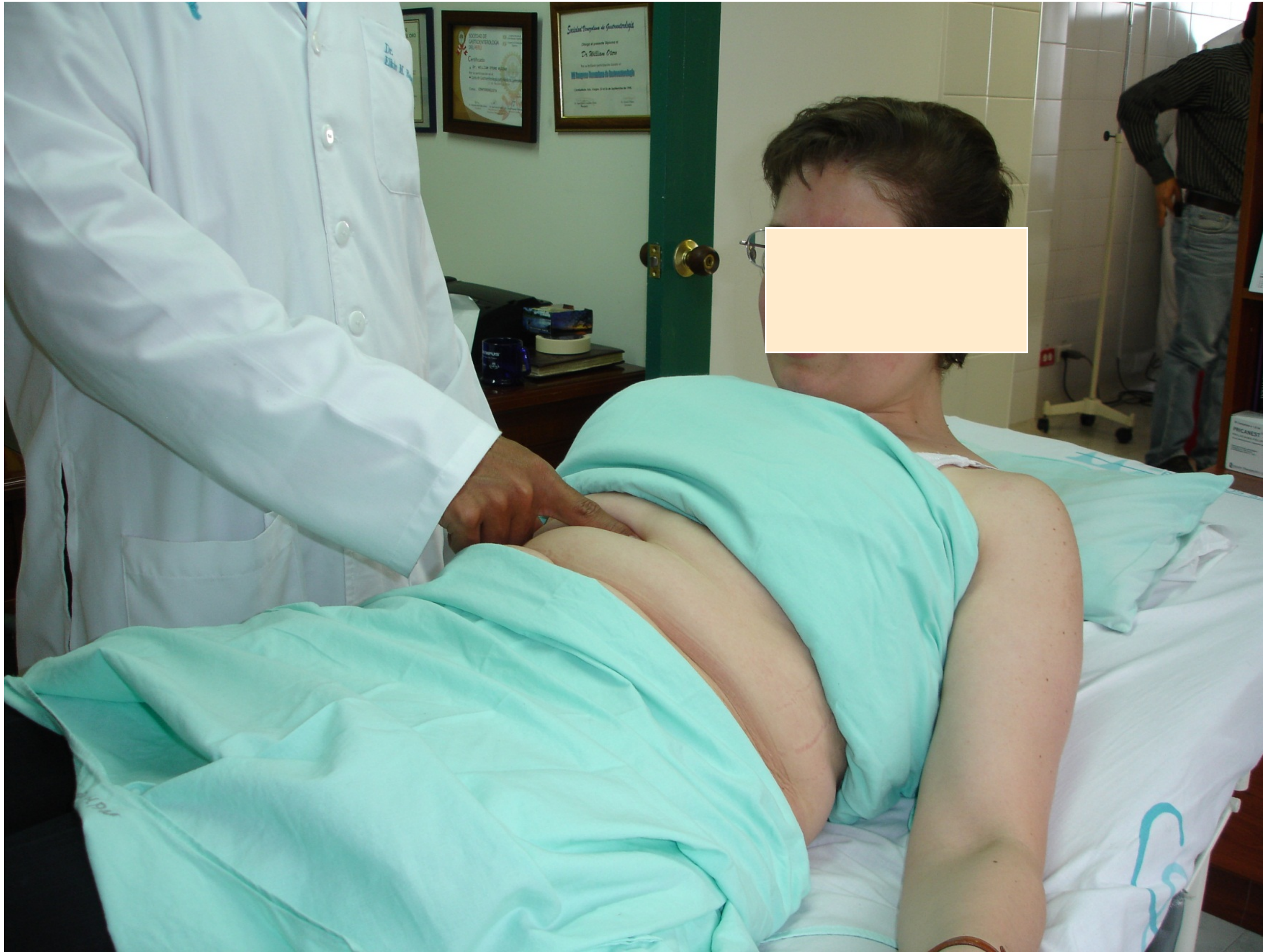
EVDA:	124 (2.5/paciente)
Colonoscopias	36
Colon por enema	4
TAC	4
Ecografía abdominal	107
Laparoscopia|	3
Total	207 procedimientos
Hospitalizacion	14 Pacientes (23%)
	107 días
	8 días (1 a 30 días)

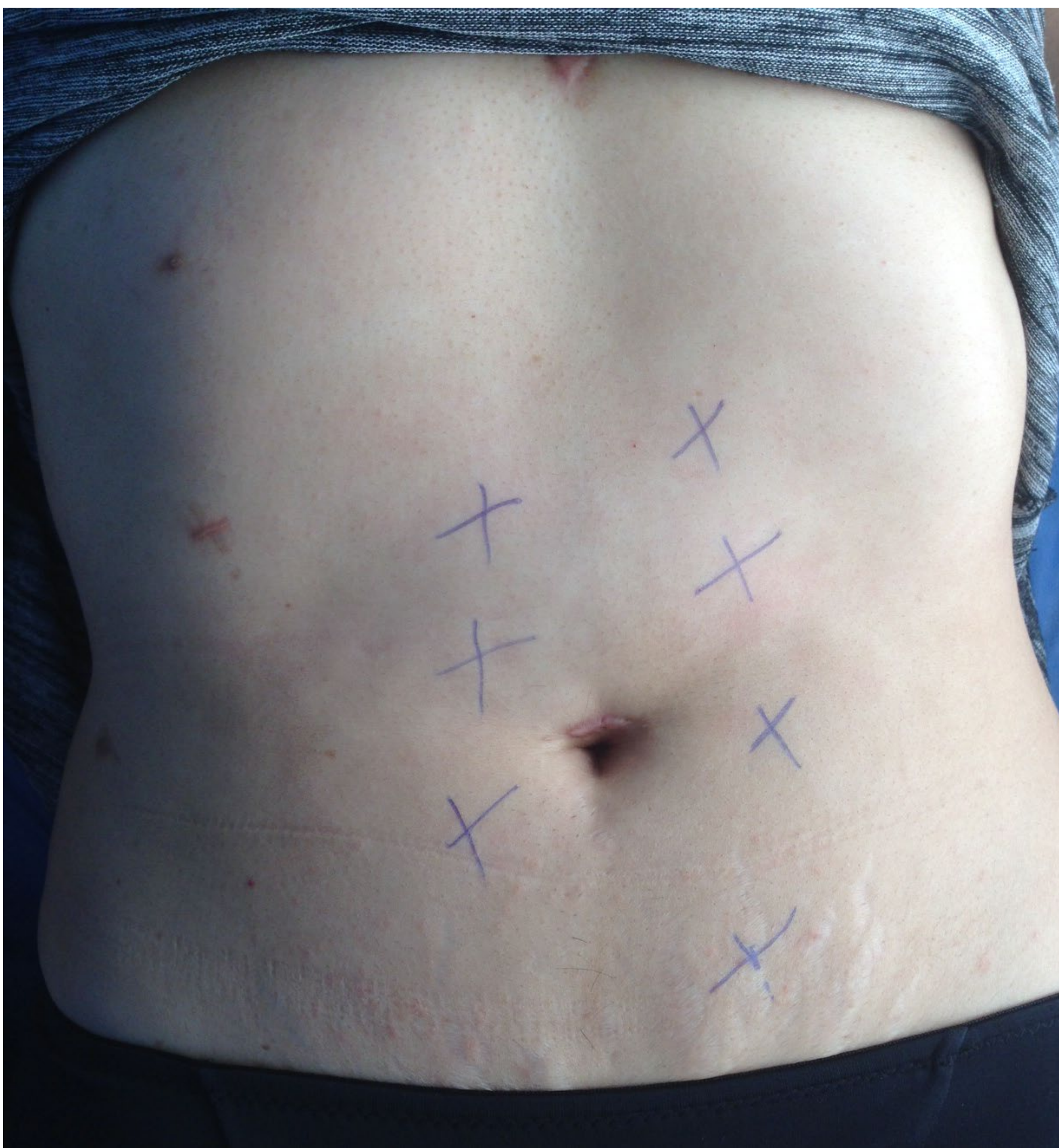
Otero W, Rev Col Gastroenterol 2007;22:261-71

Carnett A

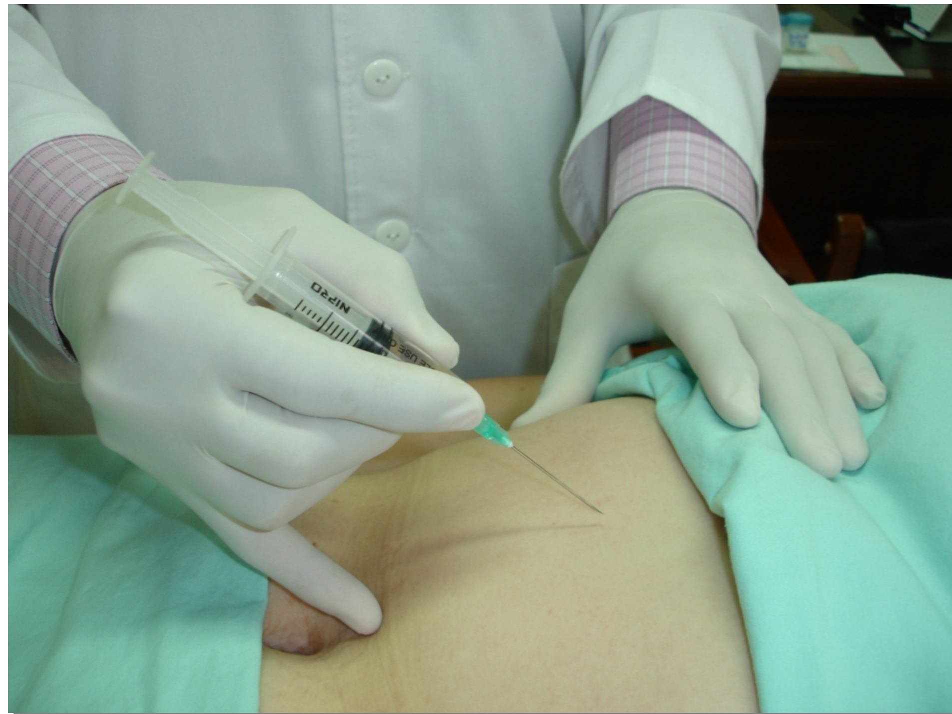


Carnett B





“Kit” de Infiltración



Dr.
Elkin M. Romero

Resultados

n=91

Inyección local 1-2 ml por punto

Otero W, Rev Col Gastroenterol 2007;22:261-71

Intensidad del Dolor

Severo	61 (67%)
Moderado	27 (30%)
Leve	3 (3.3)
Promedio:	8 +/- 2 puntos// 10

Respuesta del dolor a la infiltración

Desaparición	76 (83.5%) IC 95% 83 a 96%
Mejoría	7 (7.7%) IC 95% 3 a 15%
No modificación	8 (8.8%) IC 95% 4-18%

Favorable: 91.2%

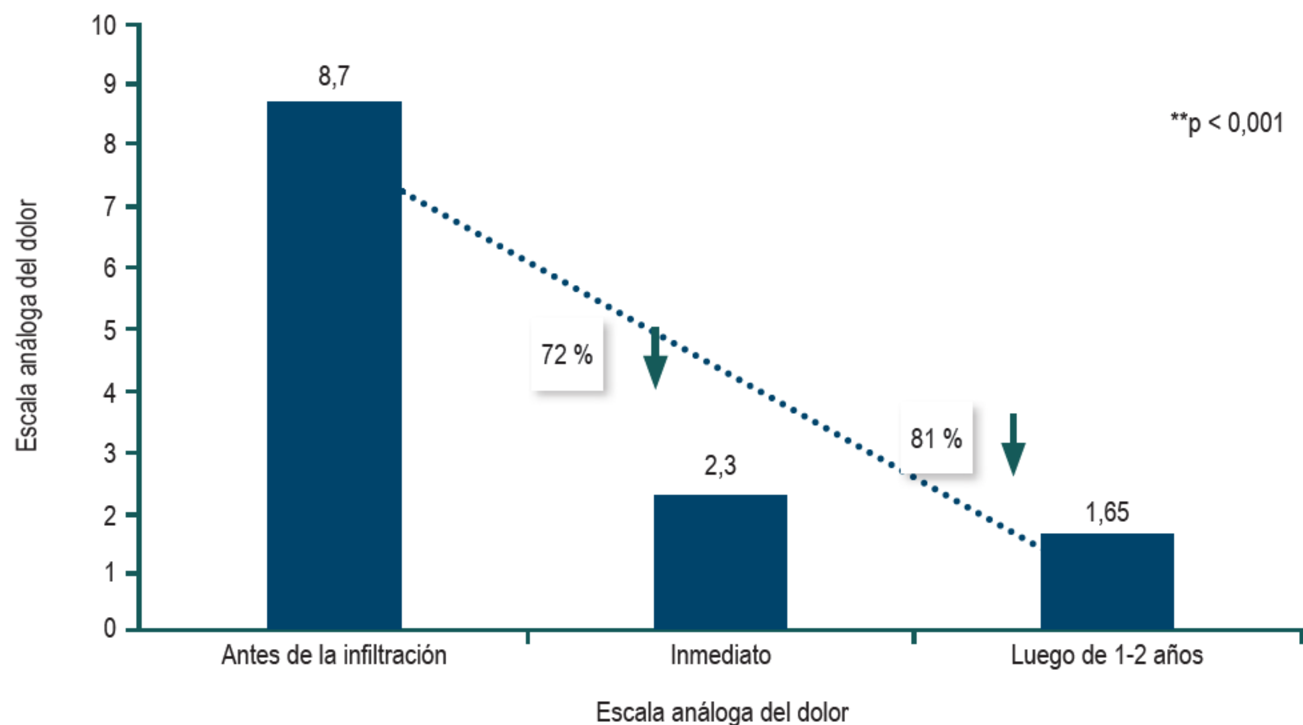
Evaluación de la respuesta sostenida en pacientes con dolor crónico de la pared abdominal tratados con infiltración de anestesia local

Evaluation of sustained responses to infiltration of local anesthetic in patients with chronic abdominal wall pain

Julián Mayorga-Ortiz, MD,[1] William Otero-Regino, MD,[2*] Juan Alzate-Granados, MD,[3] Hernando Marulanda Fernández, MD.[4]

Respuesta inmediata hasta dos años pos infiltración

N=324



Mayorga J, Rev Colomb Gastroenterol. 2020;35:169-65

Randomized clinical trial

Randomized clinical trial of trigger point infiltration with lidocaine to diagnose anterior cutaneous nerve entrapment syndrome

O. B. A. Boelens[1], M. R. Scheltinga[1], S. Houterman[2] and R. M. Roumen[1]

[1]Department of Surgery and [2]Máxima Medical Centre Academy, Máxima Medical Centre, Veldhoven, The Netherlands
Correspondence to: Mr O. B. A. Boelens, Department of Surgery, Máxima Medical Centre, de Run 4600, PO Box 7777, 5500 MB Veldhoven, The Netherlands (e-mail: o.boelens@gmail.com)

Boelens OBA,et al. Br J Surg 2013;100:217-21

Enrolment

Assessed for eligibility
$n = 126$

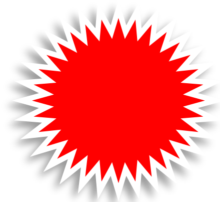
Excluded $n = 78$
- Did not meet inclusion criteria $n = 30$
- Declined to participate $n = 6$
- Other reason $n = 42$
  - TPI before enrolment $n = 25$
  - Entrapment in surgical scar $n = 17$

Randomized
$n = 48$

Allocation

TPI with 10 ml 1% lidocaine $n = 24$	TPI with 10 ml 0·9% saline $n = 24$
Follow-up	
Lost to follow-up $n = 0$	Lost to follow-up $n = 0$
Analysis	
Analysed $n = 24$ Excluded from analysis $n = 0$	Analysed $n = 24$ Excluded from analysis $n = 0$
13/24	**4/24**

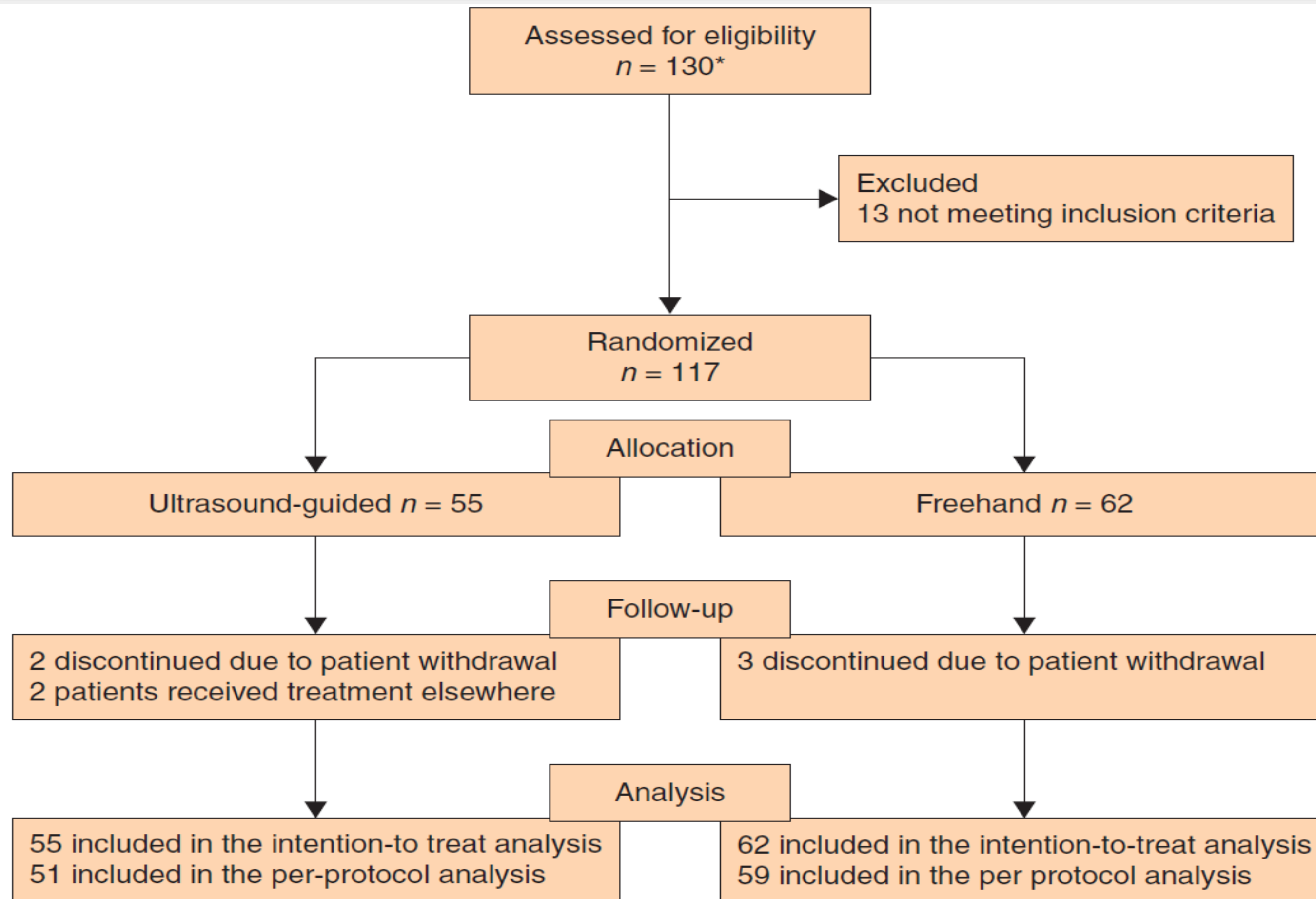
p=0.007



Boelens OBA, Br J Surg 2013;100:217-21

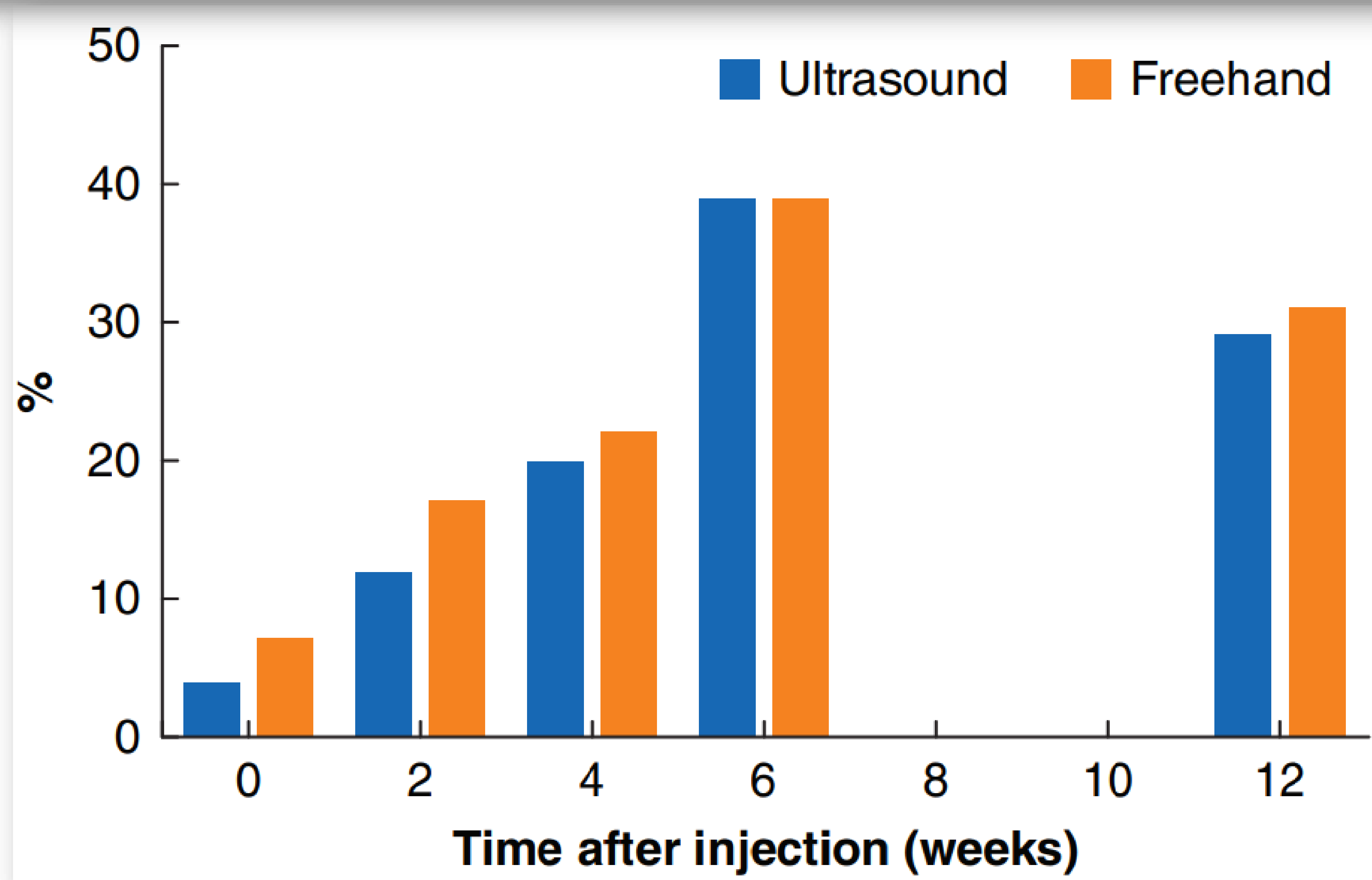
Ultrasound-guided abdominal wall infiltration *versus* freehand technique in anterior cutaneous nerve entrapment syndrome (ACNES): randomized clinical trial

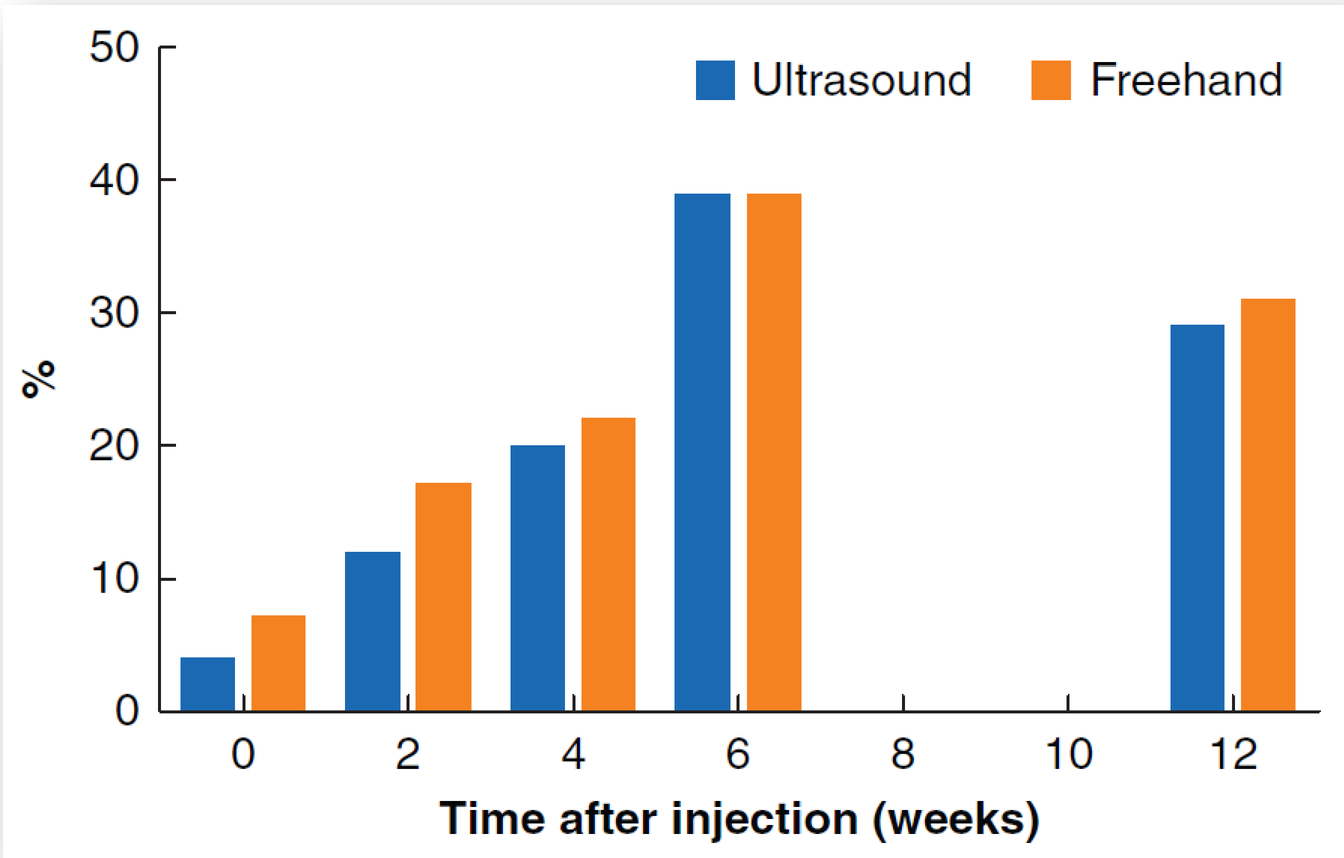
Monica L.Y.E. Jacobs [1,2,*], Rosanne van den Dungen-Roelofsen[2], Jeroen Heemskerk[3], Marc R. M. Scheltinga[1,2] and Rudi M. H. Roumen[1,2]

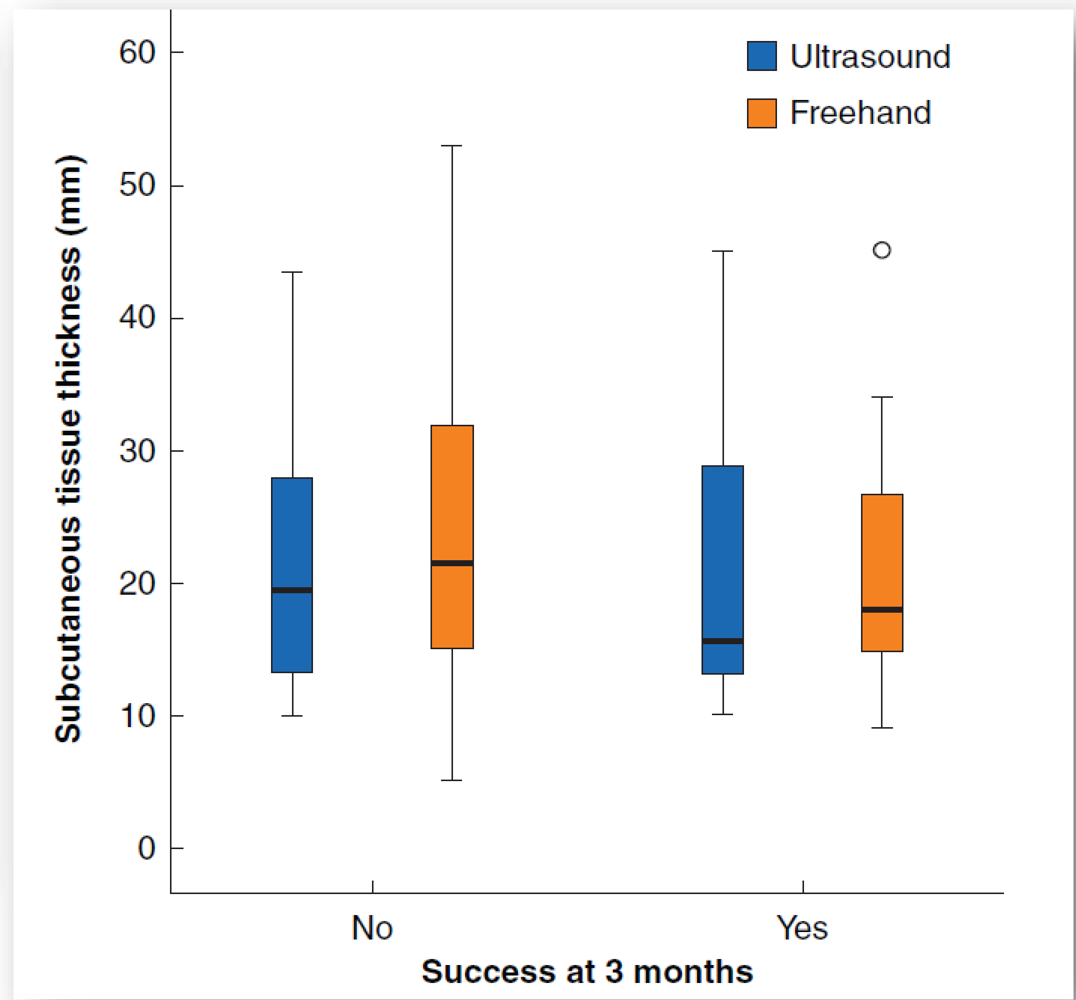


Jacobs MLYE, et al. BJS Open. 2021;5:zrab124.

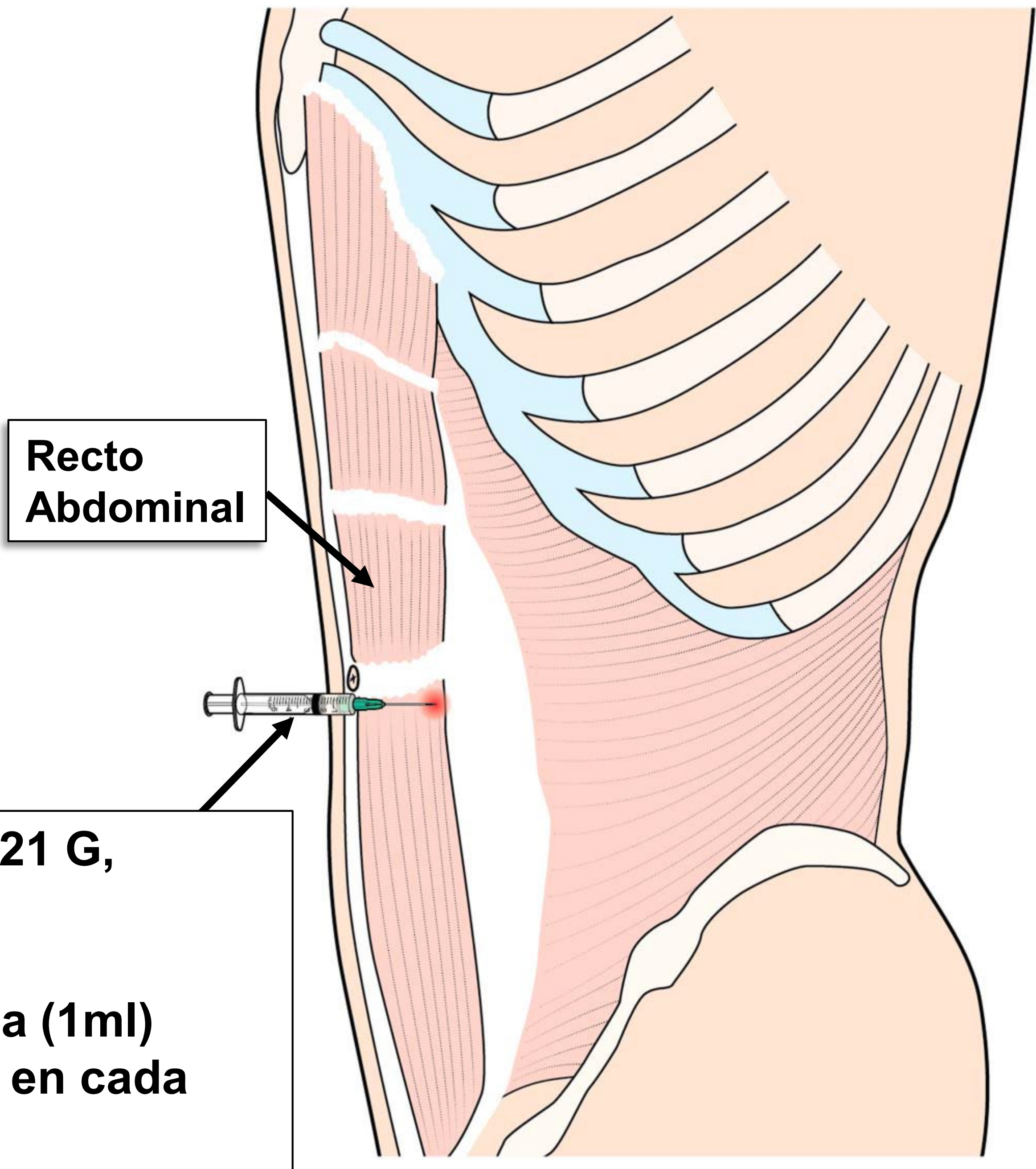
Fig. 2 Cumulative percentage of patients experiencing a persistent ≥ 50 per cent pain reduction after 1–4 abdominal wall infiltrations







Jacobs MLYE, et al. BJS Open. 2021;5:zrab124.



Jeringa 5 cc, Aguja 21 G,
Tamaño variable
4 ml Lidocaina1% +
40 mg Triamcinolona (1ml)
Inyecta 1 ml mezcla en cada punto

Singla M, Am J Gastroenterol 2020;115:645-47.

A Stick and a Burn: Our Approach to Abdominal Wall Pain

Manish Singla, MD, FACG[1,2] and Jeffrey T. Laczek, MD, FACG[1,2]

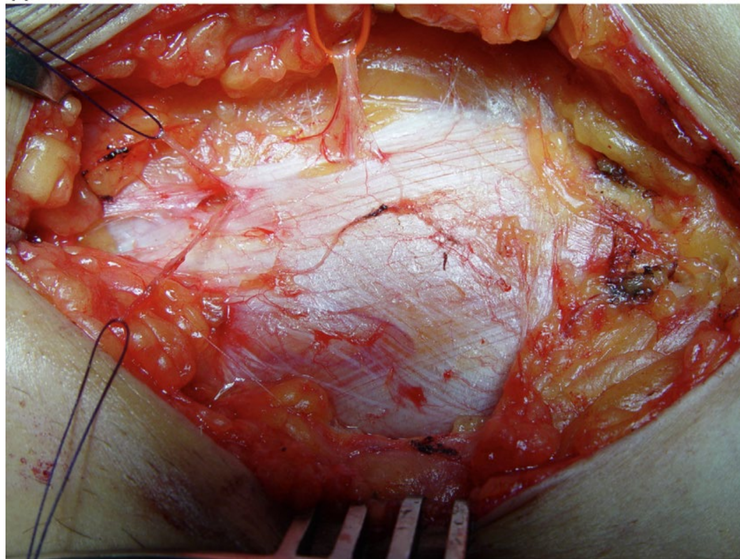
1. Mix 4 mL of 1% lidocaine with 40 mg (1 mL) of triamcinolone in a 5 mL syringe. Attach to a narrow-caliber (21 gauge or less) 5/8″ or 1″ needle.
2. Mark the site of the patient's pain on the abdominal wall and prep with chlorhexidine.
3. Insert the needle perpendicular to the patient's abdomen at the marked site with the goal to reach the rectus abdominis muscle; this normally requires the full length of the needle. We warn patients that they may feel a "stick" or a "sting" sensation.
4. Once the tip of the needle is at the point of maximal tenderness, inject 1 mL of the mixture. Before injection, warn patients that they may feel a "burning" sensation.
5. Withdraw the needle from the skin, redirect upward at a 45° angle, and reinsert the needle to a maximal depth; inject an additional 1 mL of mixture.
6. Repeat step 5 with the needle directed to the left, downward, and right, each at a 45° angle, and then remove the needle while applying pressure with sterile gauze.
7. Gently massage the injection site and apply a bandage if needed for hemostasis.

SinglaM, Am J Gastroenterol 2020;115:645–647.

Factors predicting outcome after anterior neurectomy in patients with chronic abdominal pain due to anterior cutaneous nerve entrapment syndrome (ACNES)

Frederique M.U. Mol, MD[a,b,*], Claire H. Jansen, MD[a,b], William van Dijk, MD[a,b], Percy van Eerten, MD[a,b], Mark R. Scheltinga, MD[a,b], Rudi M. Roumen, MD[a,b]

495 pacientes 78% mujeres

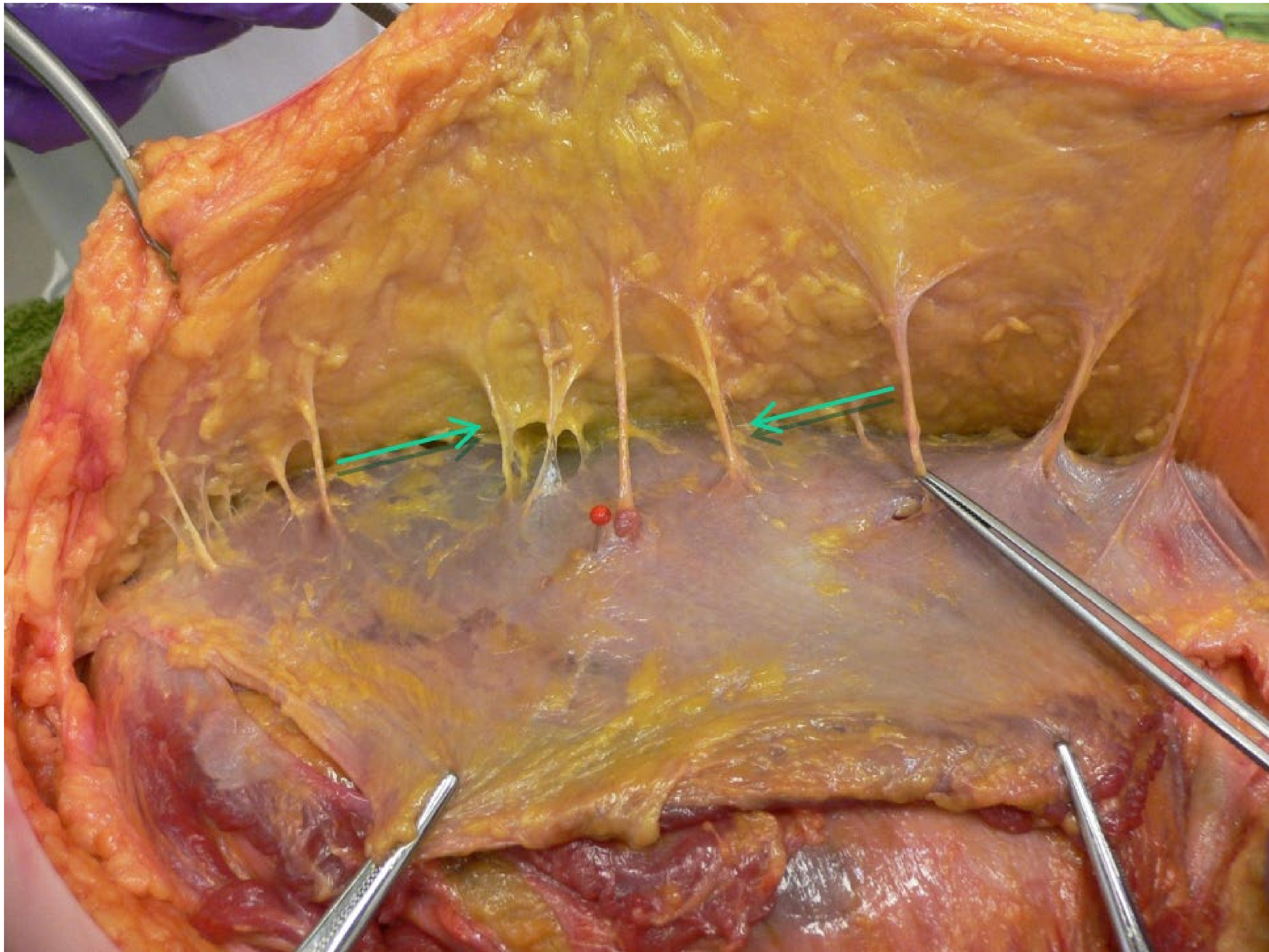


Factors associated with failure of an anterior neurectomy in ACNES patients; dermatome level was removed from multivariate analysis (*P* = .47).

	B (SE) [*P* value]	Odds	CI 95%
Constant	−2.51(0.30)		
Pain medication use	0.61(0.28)[.027]	1.84	1.07–3.17
Abdominal surgery in the past	0.62(0.28)[.026]	1.85	1.08–3.18
Paravertebral trigger points	0.95(0.32)[.003]	2.58	1.39–4.80
Effect diagnostic rectus block	1.32(0.33)[.000]	3.74	3.74–7.10

R^2 = 0.086 (Cox & Snell); 0.135 (Nagelkerke); Model X^2 34.14 $P<0.001$.
SE, standard error

Mol FMU,et al. Surgery 2019;165:417-22

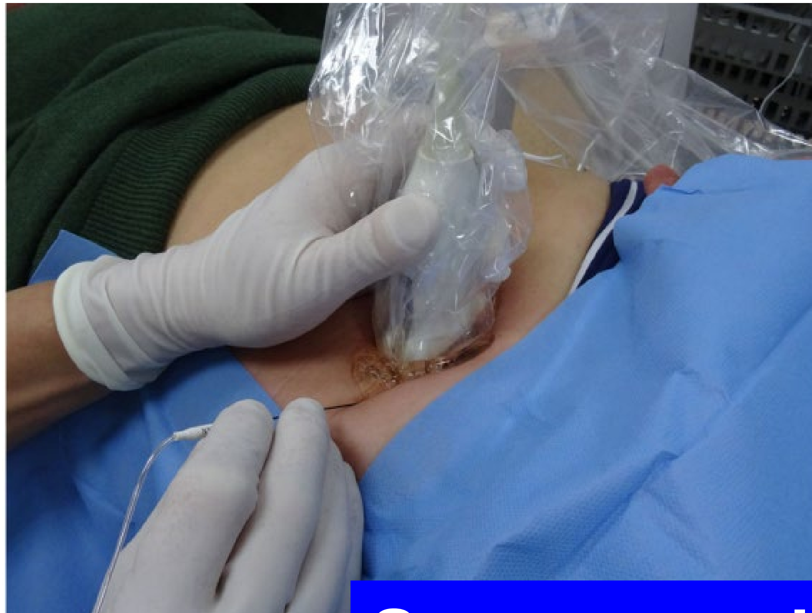


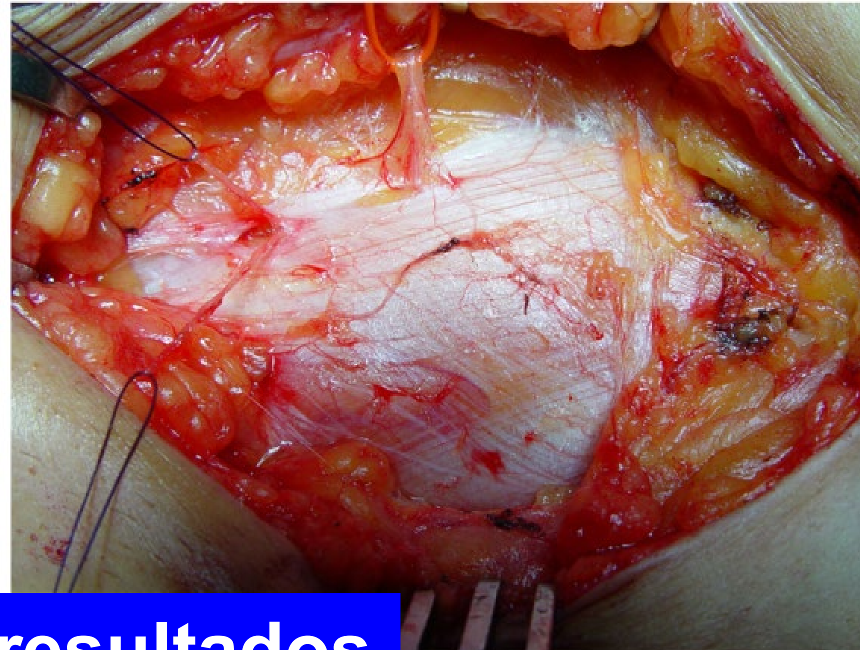
Scheltinga MR,Hernia. 2018;22:507-516

STUDY PROTOCOL Open Access

Pulsed radiofrequency or anterior neurectomy for anterior cutaneous nerve entrapment syndrome (ACNES) (the PULSE trial): study protocol of a randomized controlled trial

Robbert C. Maatman[1,2*], Monique A. H. Steegers[3], Oliver B. A. Boelens[4], Toine C. Lim[5], Hans J. van den Berg[5], Sandra A. S. van den Heuvel[3], Marc R. M. Scheltinga[1,2] and Rudi M. H. Roumen[1,2]





Se esperan los resultados

Maatman et al. Trials 2017;18:362

Dolor crónico de la pared abdominal
Experiencias en pediatría

PEDIATRICS®
OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Chronic Abdominal Pain in Children

Pediatrics 2005;115;e370
DOI: 10.1542/peds.2004-2523

TABLE 1. Currently Used Definitions to Describe Childhood Abdominal Pain

Term	Definition
Recurrent abdominal pain as defined by Apley and Naish8	≥3 episodes of abdominal pain, over a period of ≥3 mo, severe enough to affect activities
RAP	A common abbreviation for recurrent abdominal pain that has been used in the literature to depict recurrent abdominal pain as defined by Apley and Naish; many physicians incorrectly use this term to imply functional abdominal pain
Chronic abdominal pain	Abdominal pain with a minimum duration of 3 mo; some clinicians believe that pain lasting >1–2 mo is chronic
Rome II criteria for abdominal pain	Abdominal pain for at least 12 wk, which need not be consecutive, in the preceding 12 mo; these criteria apply to IBS, functional dyspepsia, and functional abdominal pain
Functional abdominal pain	Abdominal pain that occurs in the absence of anatomic abnormality, inflammation, or tissue damage
Nonorganic abdominal pain	A term that is often used interchangeably with functional abdominal pain
Psychogenic abdominal pain	A term that is often used interchangeably with functional abdominal pain

Dolor de la pared abdominal no está incluido

Eur J Pediatr (2014) 173:445–449
DOI 10.1007/s00431-013-2140-2

ORIGINAL ARTICLE

Anterior cutaneous nerve entrapment syndrome (ACNES): the forgotten diagnosis

Samira Akhnikh · Niels de Korte · Peter de Winter

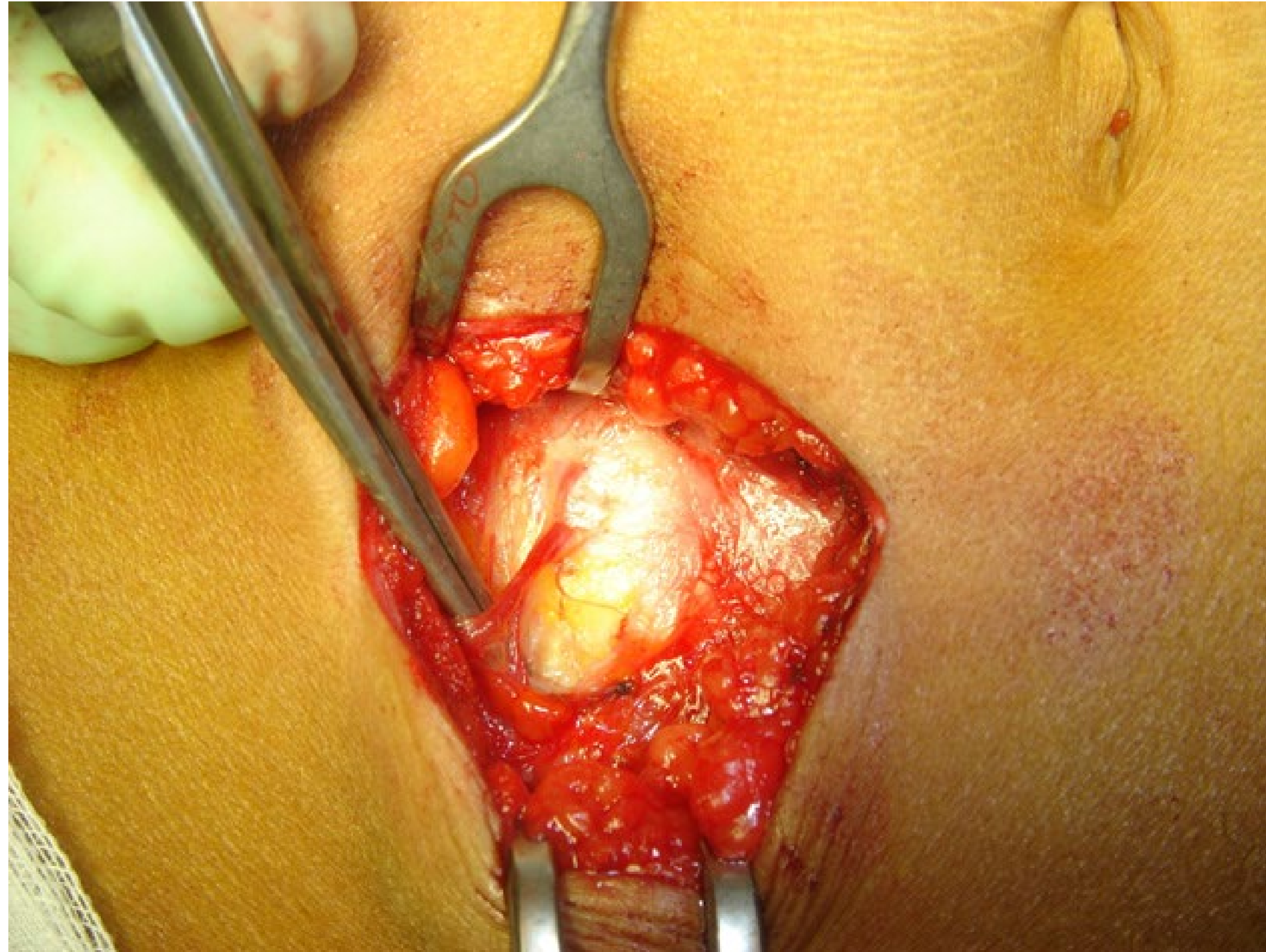
Anterior cutaneous nerve entrapment syndrome (ACNES) is an often overlooked cause of (chronic) abdominal pain. This was first recognized by Carnett and Bates in his seminal article in 1926 [7]. However, nowadays, many physicians are still unaware of this diagnosis. The literature on prevalence of ACNES in the pediatric population is very scarce. Only recently, ACNES has been described in children (Table 1) [12, 15, 17, 18]. Abdominal pain can be classified as visceral pain

Table 1 Overview of all articles related to ACNES in children

Reference number	[12] 2008	[15] 1999	[17] 2011	[18] 2007	Current study
Number of patients	1	1	8	7	3
Age	11	15	9–16	11–16	10–16
Duration of abdominal pain	3.5 months	3 months	Unknown	4 days–5 months	1 week–4 months
Relapse	0	0	All	3	0
Number of injections in relapsed patients	1	1	At least two	2–3	1
Sex	Female	Female	All females	All females	All females

Surgery for refractory anterior cutaneous nerve entrapment syndrome (ACNES) in children

Marc R. Scheltinga [a,*], Oliver B. Boelens [a], Walther E. Tjon A Ten [b], Rudi M. Roumen [a]



N=6

J Ped Surg 2011;46:699-703

Dolor de pared abdominal en niños, Enero 2008-agosto 2021 Clínica Fundadores, Centro de Gastroentertología

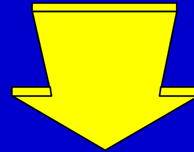
N= 29 niños	Valores
Edad	9-14 (11)
Mujeres	12
Evolución	8–120 días (28.5)
Analgésicos: Acetaminofen, Tramadol, Hioscina	17
AINES	18
Hospitalización	12
Laparoscopia	5

Otero W, Manuscrito en preparación 2022

Diagnósticos previos

"Colon irritable"
"Gastritis"
Dolor Funcional
Alergia alimenticia
Adenitis mesentérica
Dolor sicógeno
Ansiedad

Atrapamiento del cutáneo anterior
Un diagnóstico olvidado



Solo 4% de especialistas
lo piensan y lo buscan !

*Constanza CD, Clin Gastroenterol Hepatol 2004;2:1812-6
Rivero M, Gastroenterol Hepatol 2007;28:244-50

Mensajes para la casa

El dolor abdominal crónico tiene muchas causas
Es necesario excelente historia clínica
Siempre examinar y buscar el signo de Carnett
En ”semiología básica” enseñar digno de Carnett
La inyección local con lidocaina evita $millones
Inyecciòn lidocaina costoefectivo en medicina

El paciente tiene lo que el médico sabe!!

Muchas gracias !