产后腹直肌分离症：诊与治

何 凯

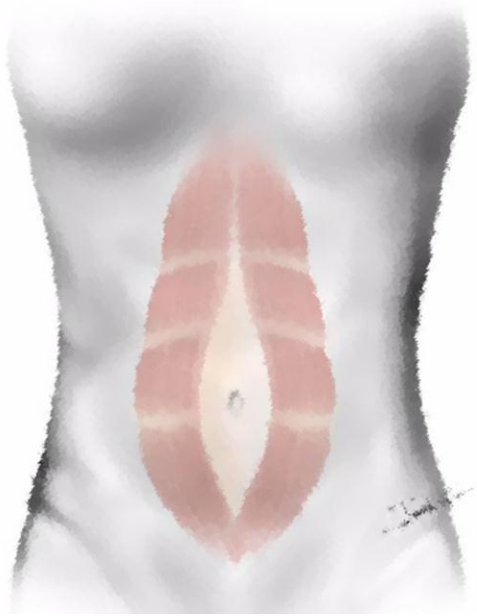
复旦大学附属华山医院 腹壁和减重外科

中国妇幼保健协会 医疗美容分会常务委员

中国医师协会 疝和腹壁外科学组青年委员

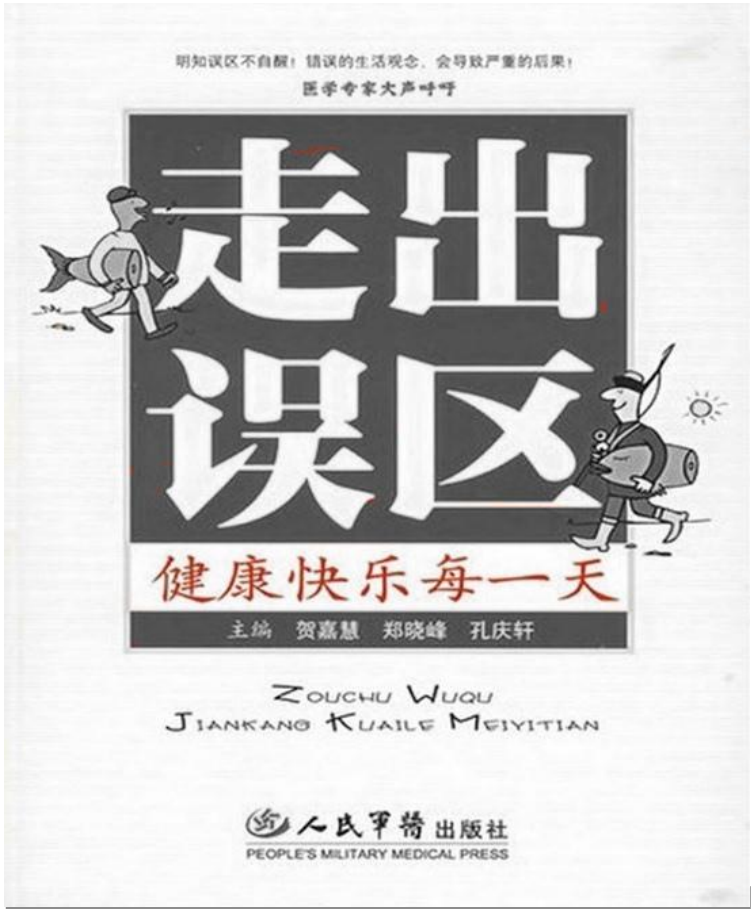
中国医促会 疝和腹壁外科学组青年委员

中国康复医师协会 产后康复专委会委员

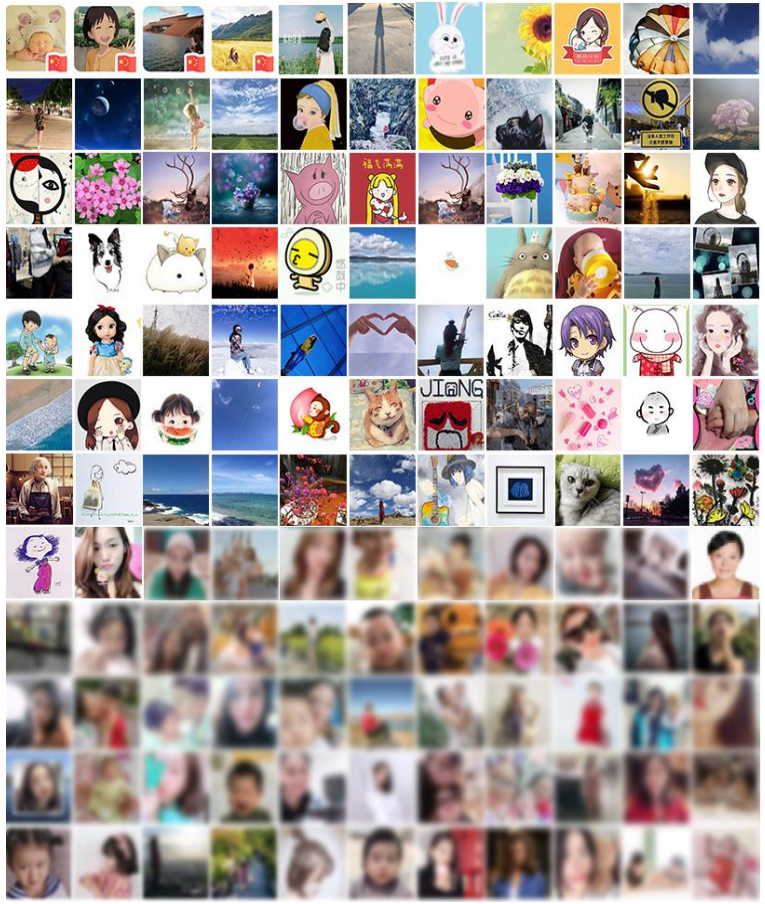


讲课内容（三部分）

产后腹直肌分离症



诊疗：现状与误区



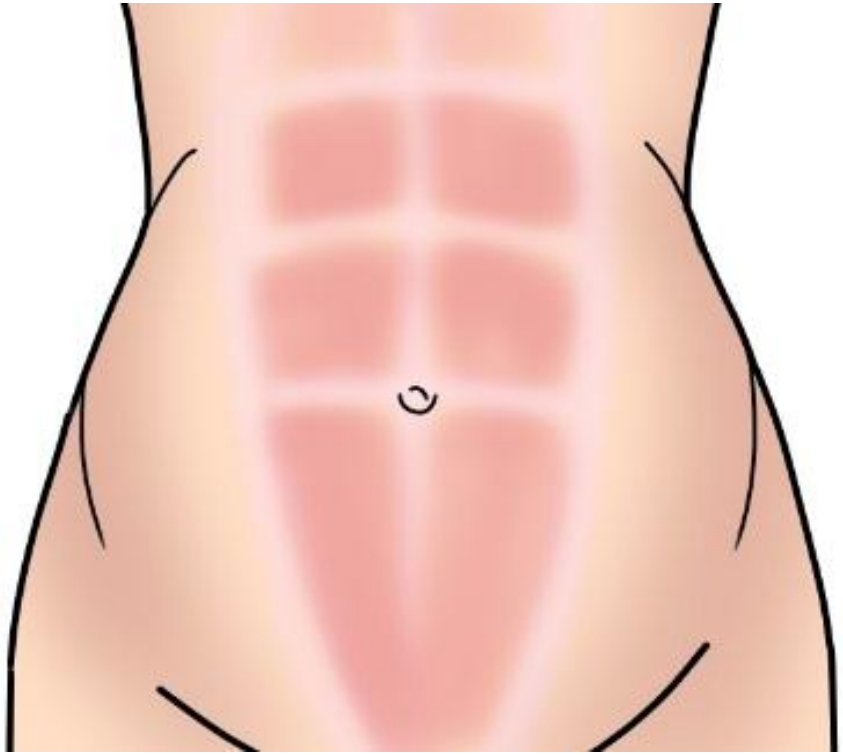
华山：经验与分享

第一部分

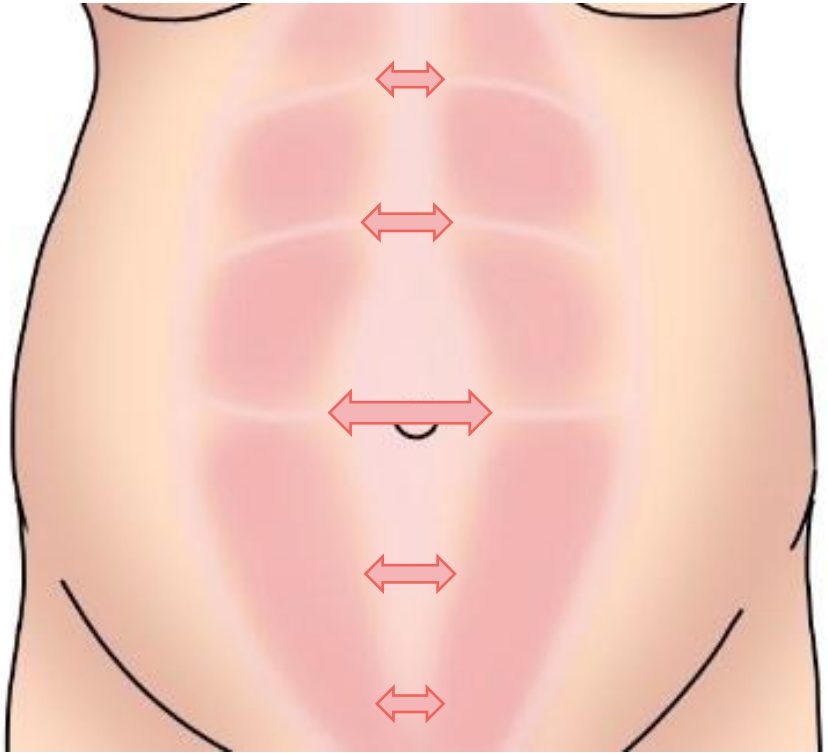
产后腹直肌分离症

什么是腹直肌分离：生理性 or 病理性

- 正常腹直肌间宽度 <2cm



- 腹直肌分离 >3cm



腹直肌分离的各种分型

Beer 分型	
腹壁平面	宽度（cm）
剑突下	15
脐周	22
脐下	16

Nahas 分型	
A型	孕产型
B型	肌筋膜松弛型
C型	遗传先天型
D型	肥胖型

- Nahabedian MY. Diastasis Recti Abdominis Muscles. <The Textbook of Hernia>. 2017.

孕产型腹直肌分离：高危因素

- 孕产妇因素
  - 高龄
  - 肥胖
  - 缺乏锻炼
  - 多次妊娠
  - 剖腹产手术史...
- 胎儿因素
  - 体重大
  - 羊水多
  - 多胎妊娠
- 社会因素

- Patrícia. Prevalence and risk factors of diastasis recti abdominis from late pregnancy to 6 months postpartum, and relationship with lumbo-pelvic pain. Manual Therapy. 2015.
- Sperstad. Diastasis recti abdominis during pregnancy and 12 months after childbirth: prevalence, risk factors and report of lumbo-pelvic pain. Br J Sports Med. 2016.

孕产型腹直肌分离：发生率

Original article

Diastasis recti abdominis during pregnancy and 12 months after childbirth: prevalence, risk factors and report of lumbopelvic pain

Jorun Bakken Sperstad,[1] Merete Kolberg Tennfjord,[1,2] Gunvor Hilde,[2] Marie Ellström-Engh,[2,3] Kari Bø[1]

研究对象：300位初产妈妈

研究时间：怀孕～产后1年

研究结果：1）发生率高

（33%~60%~45%~33%）

2）腰背痛多

（31.1%，38.6%；27.5%）

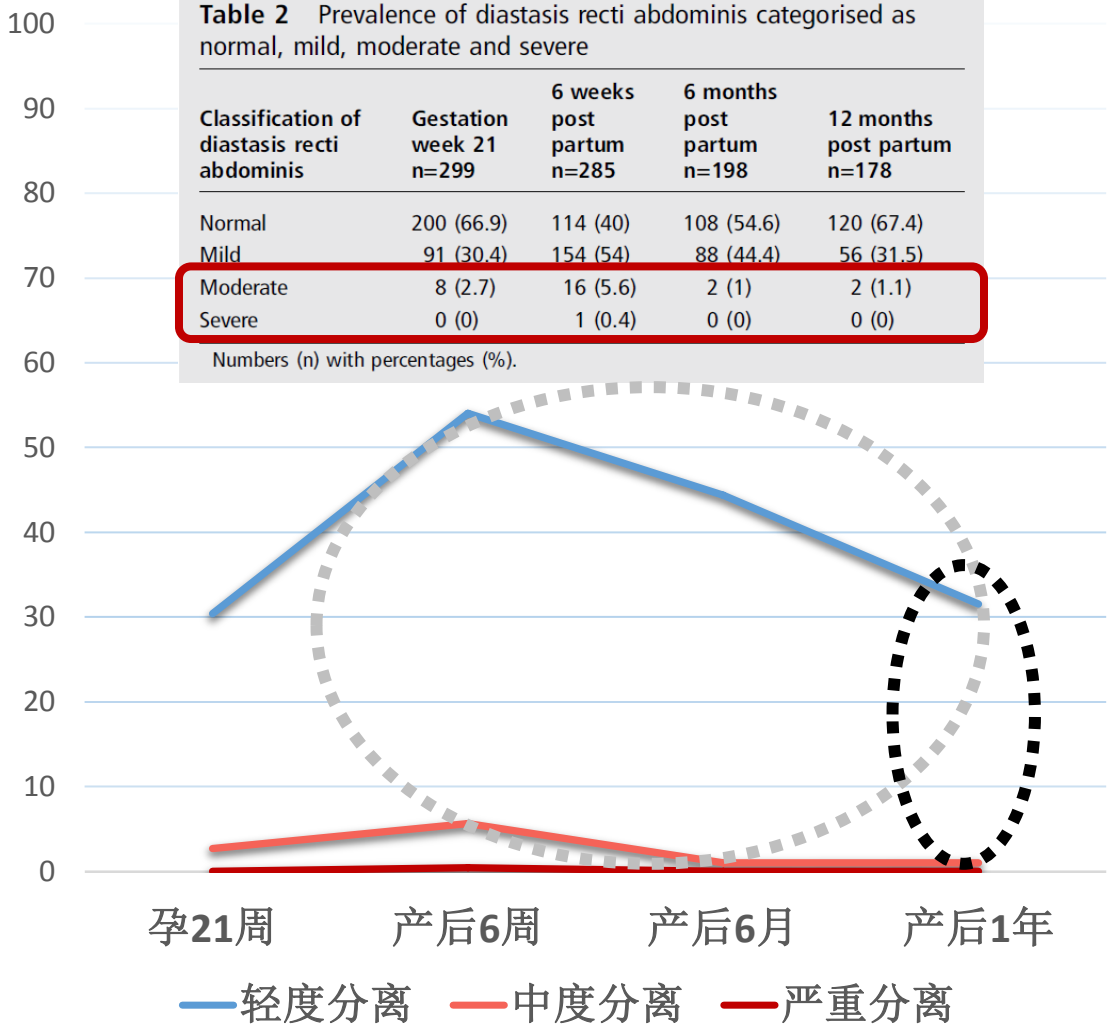
How might it impact on clinical practice in the future?

- Given the high prevalence of mild diastasis recti abdominis, coaches and healthcare providers should assess whether the condition is present in post partum women.

Table 2 Prevalence of diastasis recti abdominis categorised as normal, mild, moderate and severe

Classification of diastasis recti abdominis	Gestation week 21 n=299	6 weeks post partum n=285	6 months post partum n=198	12 months post partum n=178
Normal	200 (66.9)	114 (40)	108 (54.6)	120 (67.4)
Mild	91 (30.4)	154 (54)	88 (44.4)	56 (31.5)
Moderate	8 (2.7)	16 (5.6)	2 (1)	2 (1.1)
Severe	0 (0)	1 (0.4)	0 (0)	0 (0)

Numbers (n) with percentages (%).



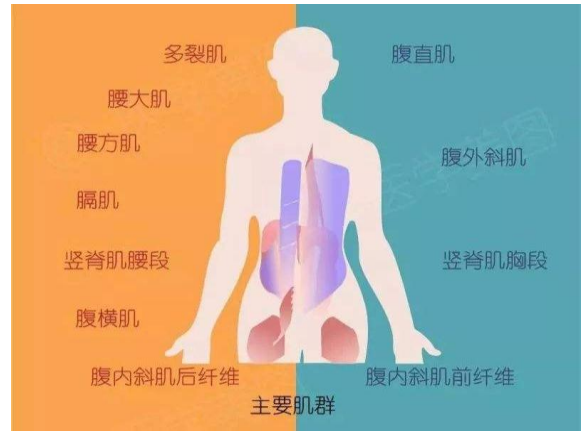
产后腹直肌分离症：伴随症状

- 腹壁外观

症状一

- 核心减退

症状二

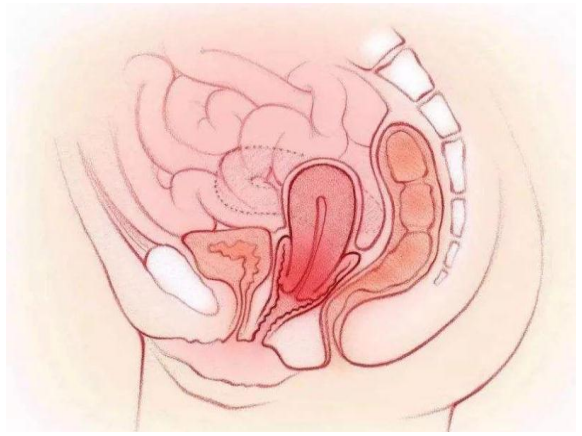


危害三

- 腰背疼痛

症状四

- 内脏下垂



- DR.Benjamin. Relationship between diastasis of the rectus abdominis muscle (DRAM) and musculoskeletal dysfunctions, pain and quality of life: a systematic review. Physiotherapy. 2019.

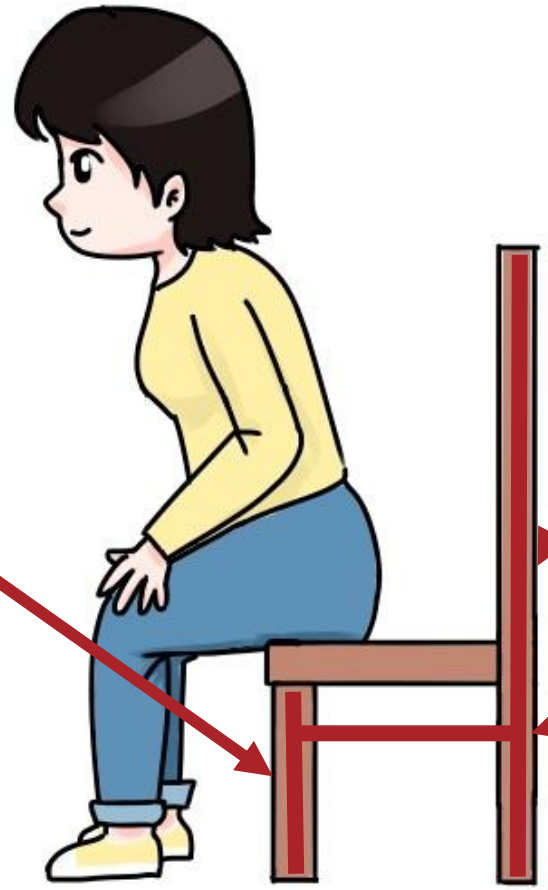
腹壁躯干部位：正常解剖结构✓

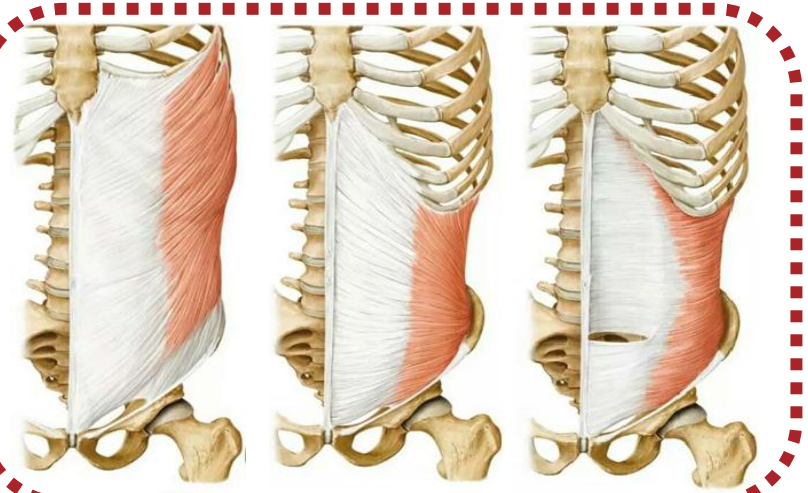
腹直肌群
- 腹直肌
- 锥状肌

腹侧肌群
- 腹外斜肌
- 腹内斜肌
- 腹横肌

腹壁躯干部位：正常解剖结构✓

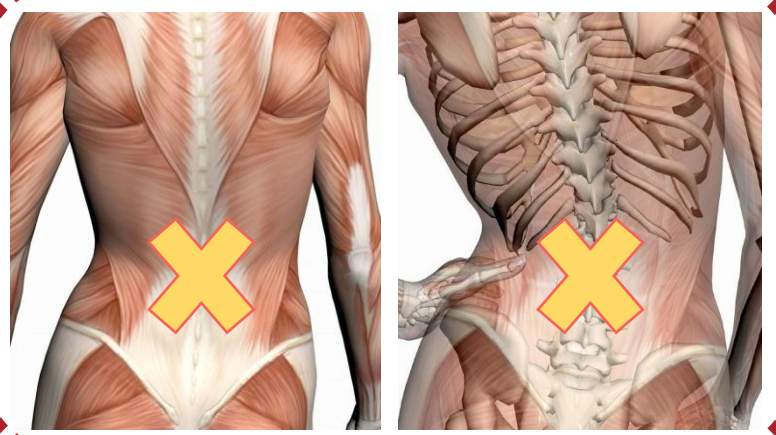
腹直肌：强健有力



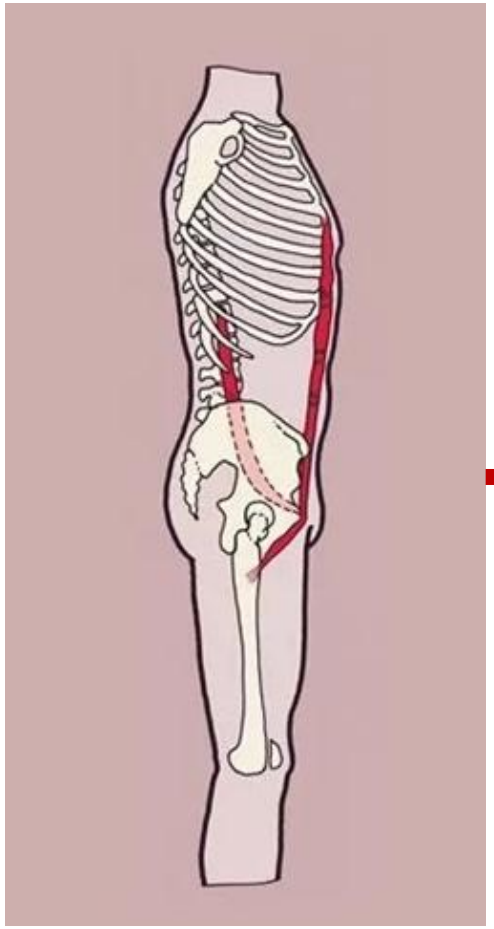


产后腹直肌分离症：腹壁结构✖

腹直肌：松软无力



产后腹直肌分离症：腹壁结构✖

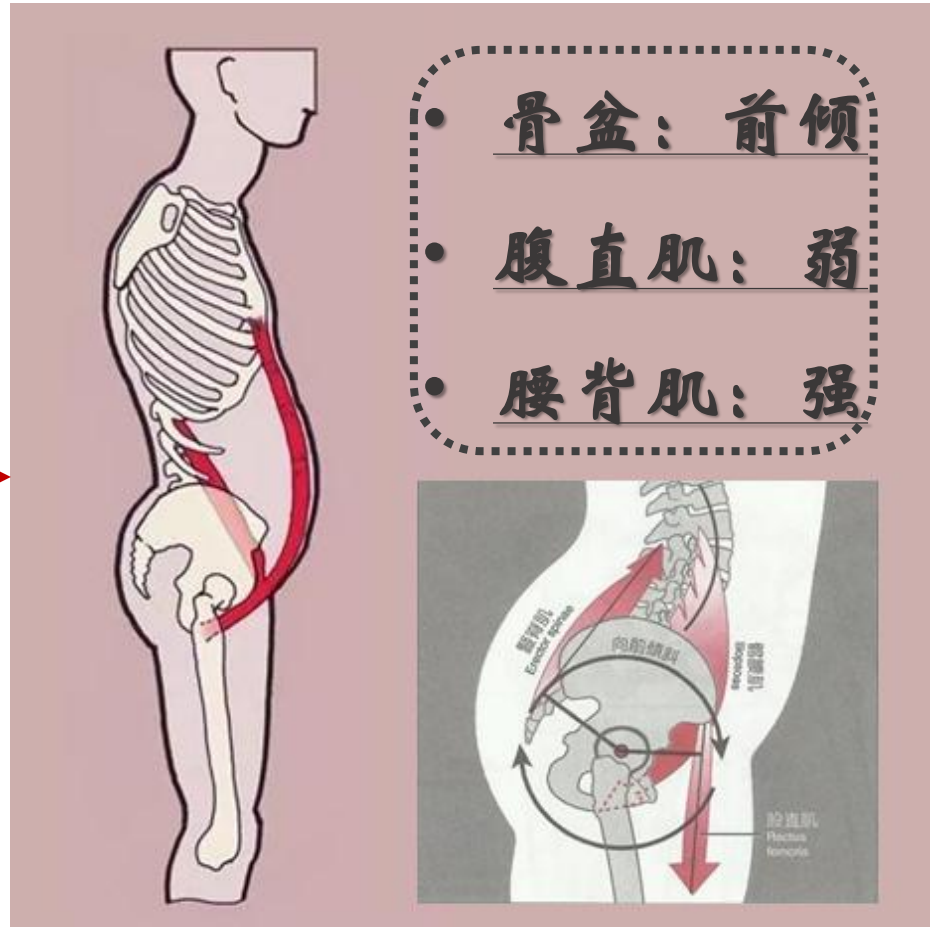


竖脊肌紧张

腹直肌 弱

臀大肌弱

髂腰肌紧张

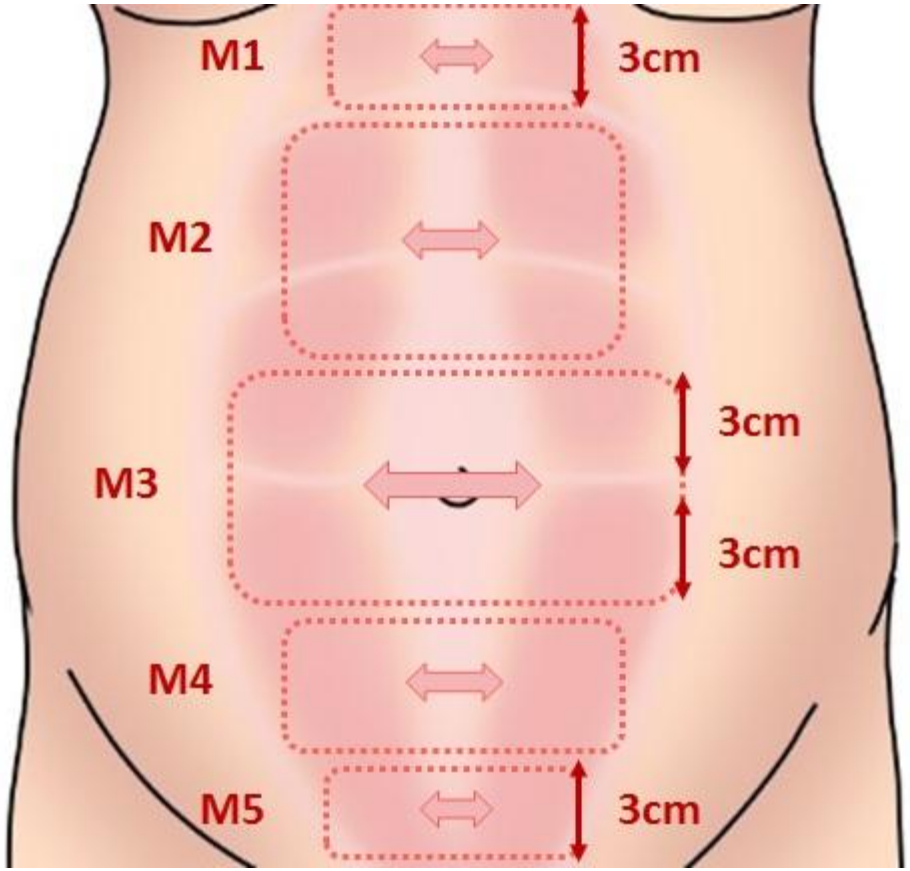


- 骨盆：前倾
- 腹直肌：弱
- 腰背肌：强

第二部分

诊疗：现状与误区

产后腹直肌分离症的指南分型*

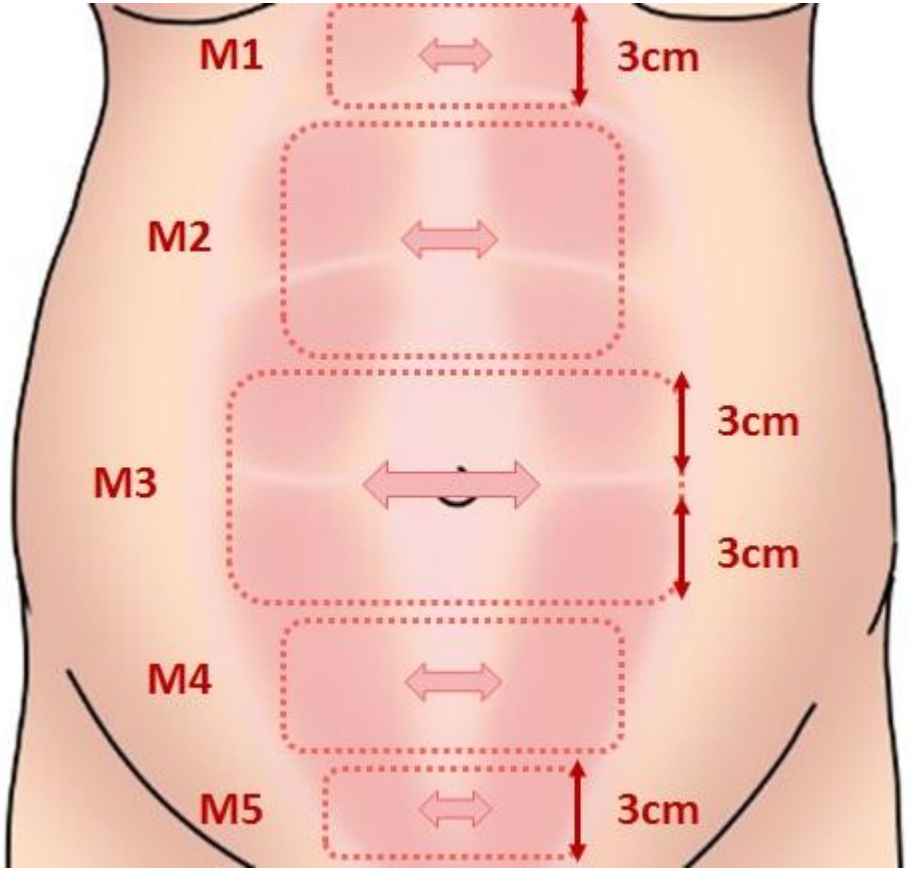


2019 指南分型	
分区	M
W1	<3cm
W2	3-≤5cm
W3	>5cm

- Wolfgang Reinpold. Classification of Rectus Diastasis—A Proposal by the German Hernia Society (DHG) and the International Endohernia Society (IEHS). 2019.

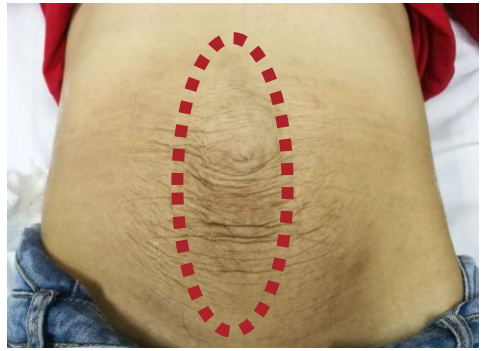
产后腹直肌分离症：如何诊断

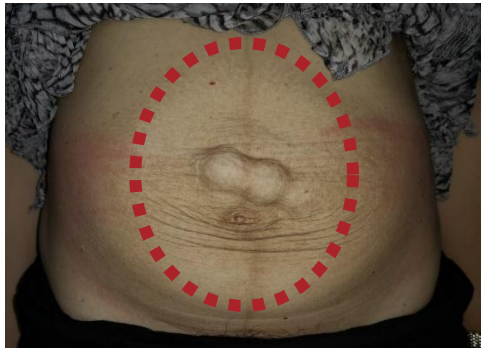
- 产后：腹直肌分离 > 3cm



- 检查方法
  - 站立位腹壁膨隆状态

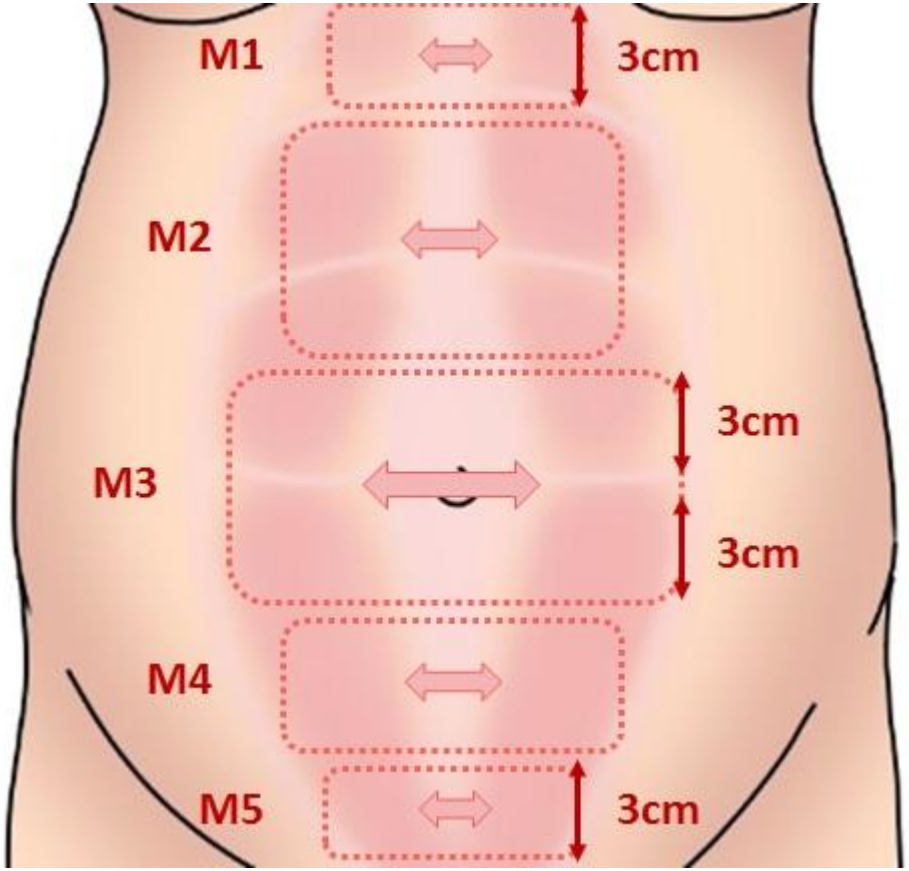
  - 平卧位腹壁外观状态





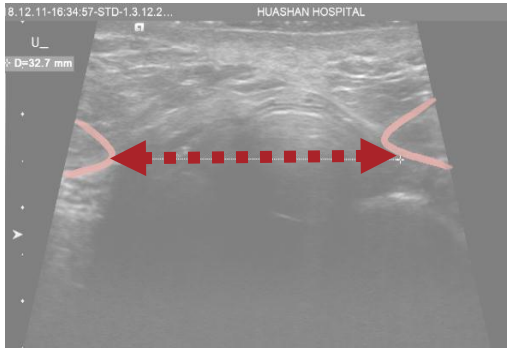
产后腹直肌分离症：如何诊断

- 产后：腹直肌分离 > 3cm



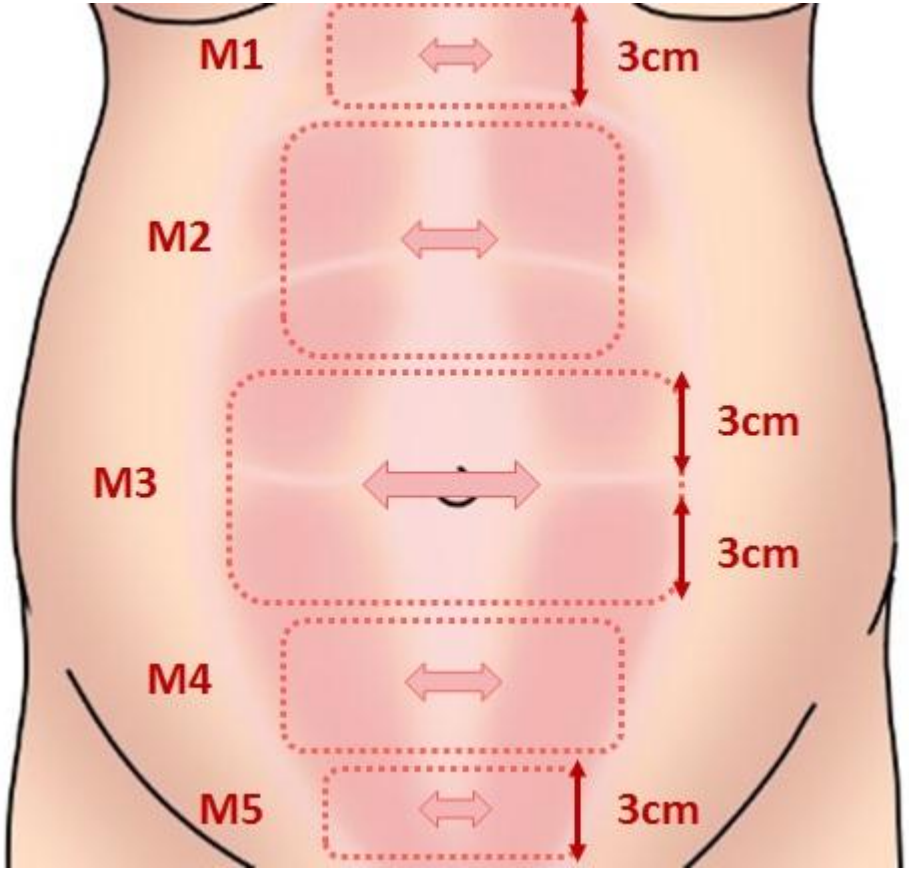
- 检查方法
  - 游标卡尺检测（常用）

  - 超声影像检测（首选）

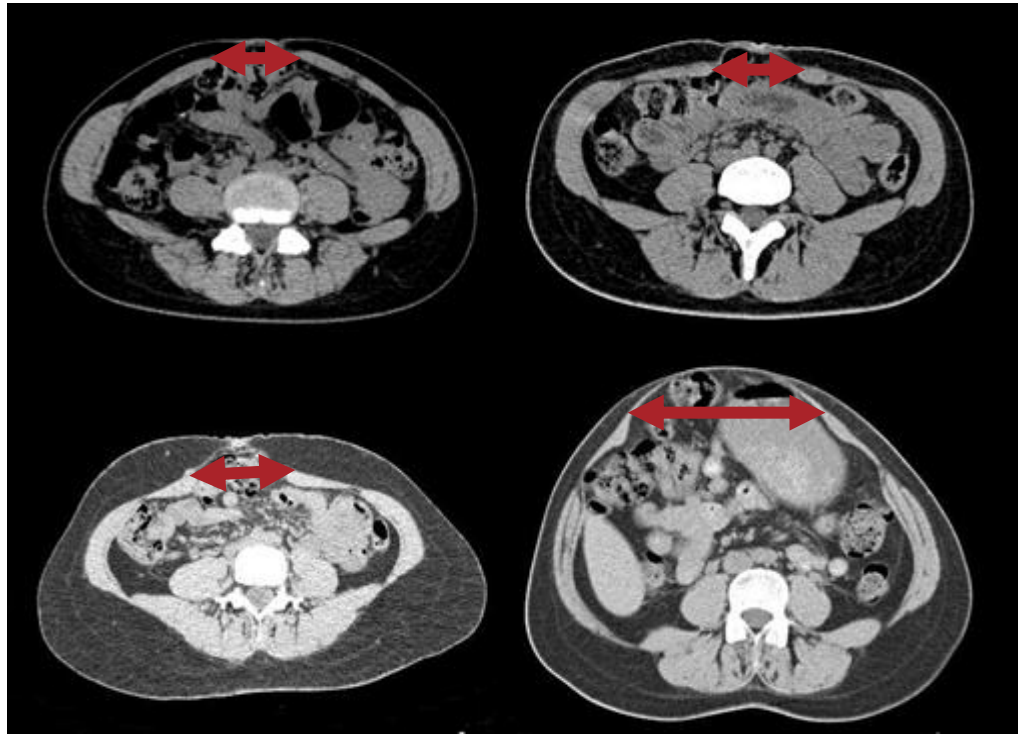


产后腹直肌分离症：如何诊断

- 产后：腹直肌分离 > 3cm



- 检查方法
  - 放射影像检测（CT、MRI）



产后腹直肌分离症：如何评估

- 疼痛评分：静息位、运动位，
- 疼痛部位：腰背部、其他…

（HerQLes，SF36，SAS，SDS）

（核心肌肉功能的评估）

产后腹直肌分离症：如何评估

Original Paper

Digestive Surgery

Dig Surg 2015;32:112–116
DOI: 10.1159/000371859

Received: September 1, 2014
Accepted after revision: December 31, 2014
Published online: March 5, 2015

Correlation between Abdominal Rectus Diastasis Width and Abdominal Muscle Strength

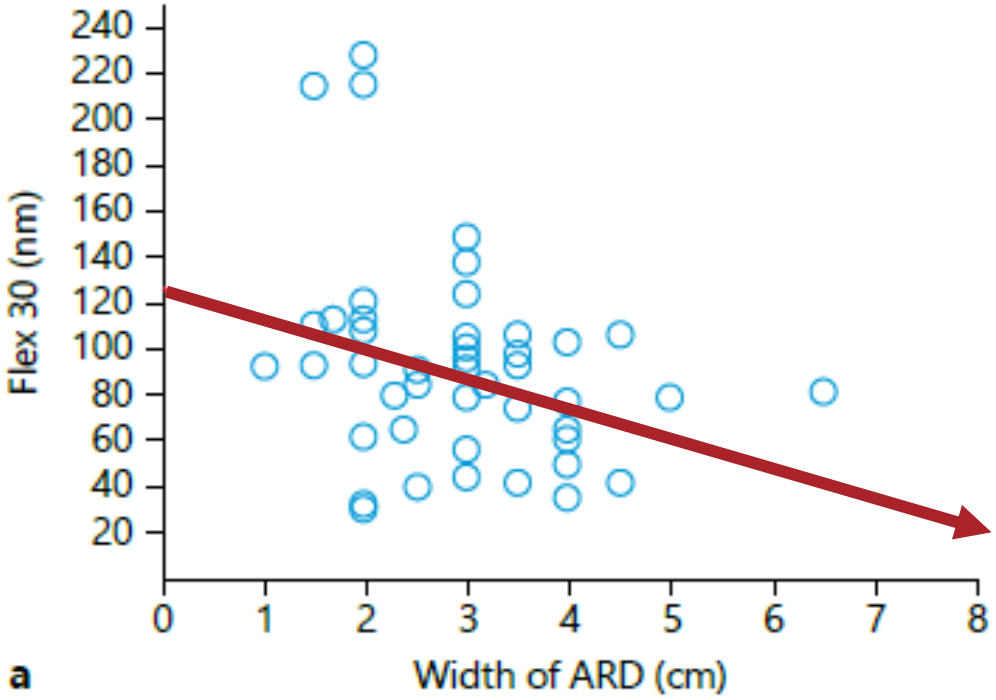
Ulf Gunnarsson[a] Birgit Stark[c] Ursula Dahlstrand[b] Karin Strigård[a]

[a]Department of Surgical and Perioperative Sciences, Umeå University, Umeå, [b]Department for Surgery, CLINTEC, Karolinska Institutet, Stockholm, and [c]Department for Molecular Medicine and Surgery, Karolinska Institutet, Stockholm, Sweden

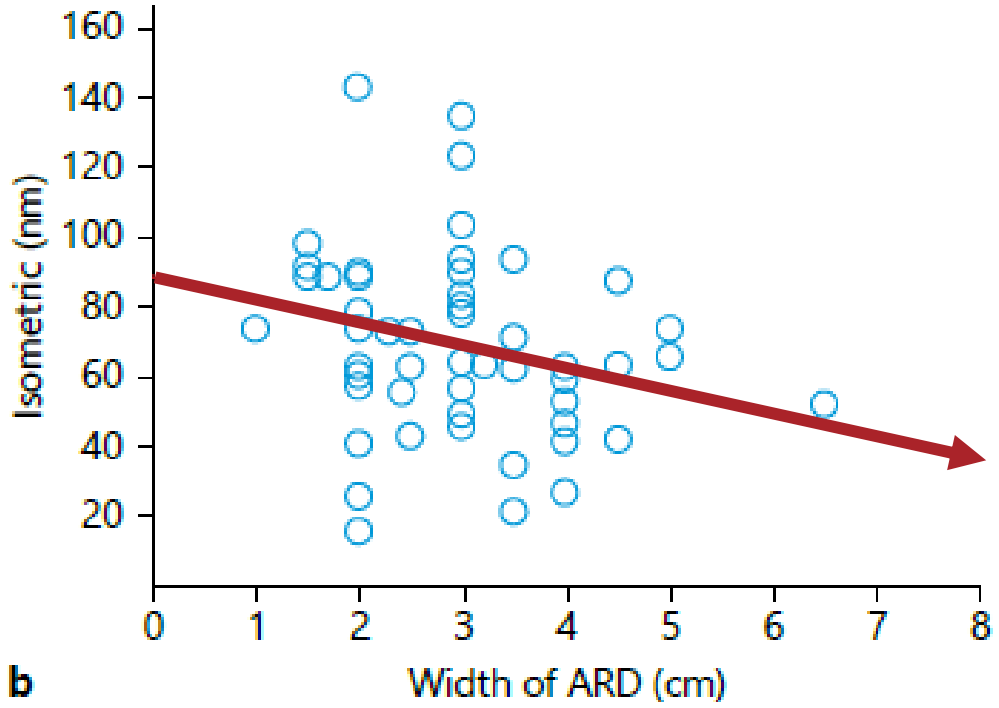
BIODEX® System 4 Pro

产后腹直肌分离症：如何评估

- 腹直肌分离越宽



- 躯干核心肌力越弱



- Gunnarsson U, Correlation between abdominal rectus diastasis width and abdominal muscle strength. Dig Surg. 2015;32(2):112–6.

产后腹直肌分离症：如何治疗

ELSEVIER

Physiotherapy

Physiotherapy 100 (2014) 1–8

Systematic review

Effects of exercise on diastasis of the rectus abdominis muscle in the antenatal and postnatal periods: a systematic review☆

D.R. Benjamin[a,*], A.T.M. van de Water[b], C.L. Peiris[a,b]

[a] Physiotherapy Department, Angliss Hospital, Eastern Health, Australia
[b] Department of Physiotherapy, School of Allied Health, La Trobe University, Victoria, Australia

康复治疗

Systematic review

Relationship between diastasis of the rectus abdominis muscle (DRAM) and musculoskeletal dysfunctions, pain and quality of life: a systematic review

Deenika R. Benjamin[a,*], Helena C. Frawley[b,c], Nora Shields[a], Alexander T.M. van de Water[d], Nicholas F. Taylor[a,e]

[a] Department of Rehabilitation, Nutrition & Sport, School of Allied Health, La Trobe University, Victoria, Australia
[b] School of Primary and Allied Health Care, Faculty of Medicine, Nursing and Health Sciences, Monash University, Victoria, Australia
[c] Centre of Allied Health Research & Education, Cabrini Hospital, Victoria Australia
[d] Department of Physiotherapy and Lectorate of Health and Movement, Academy of Health Sciences, Saxion University of Applied Sciences, Netherlands
[e] School of Allied Health, Allied Health Clinical Research Office, Eastern Health, Victoria, Australia

Classification of Rectus Diastasis—A Proposal by the German Hernia Society (DHG) and the International Endohernia Society (IEHS)

Wolfgang Reinpold[1†], Ferdinand Köckerling[2*†], Reinhard Bittner[3], Joachim Conze[4], René Fortelny[5], Andreas Koch[6], Jan Kukleta[7], Andreas Kuthe[8], Ralph Lorenz[9] and Bernd Stechemesser[10]

手术治疗

Surg Endosc (2017) 31:4934–4949
DOI 10.1007/s00464-017-5607-9

REVIEW

The general surgeon's perspective of rectus diastasis. A systematic review of treatment options

Elwin H. H. Mommers[1] · Jeroen E. H. Ponten[2] · Aminah K. Al Omar[1] · Tammo S. de Vries Reilingh[3] · Nicole D. Bouvy[1] · Simon W. Nienhuijs[2]

产后腹直肌分离症：康复治疗

Original Article

Ann Rehabil Med 2017;41(3):465-474
pISSN: 2234-0645 • eISSN: 2234-0653
https://doi.org/10.5535/arm.2017.41.3.465

arm
Annals of Rehabilitation Medicine

Neuromuscular Electrical Stimulation and Strength Recovery of Postnatal Diastasis Recti Abdominis Muscles

Dalia M. Kamel, PhD[1,2], Amel M. Yousif, PhD[1]

[1]Department of Physiotherapy for Obstetrics and Gynecology, Faculty of Physical Therapy, Cairo University, Giza, Egypt;
[2]Department of Physiotherapy, College of Medical & Health Sciences, Ahlia University, Manama, Bahrain

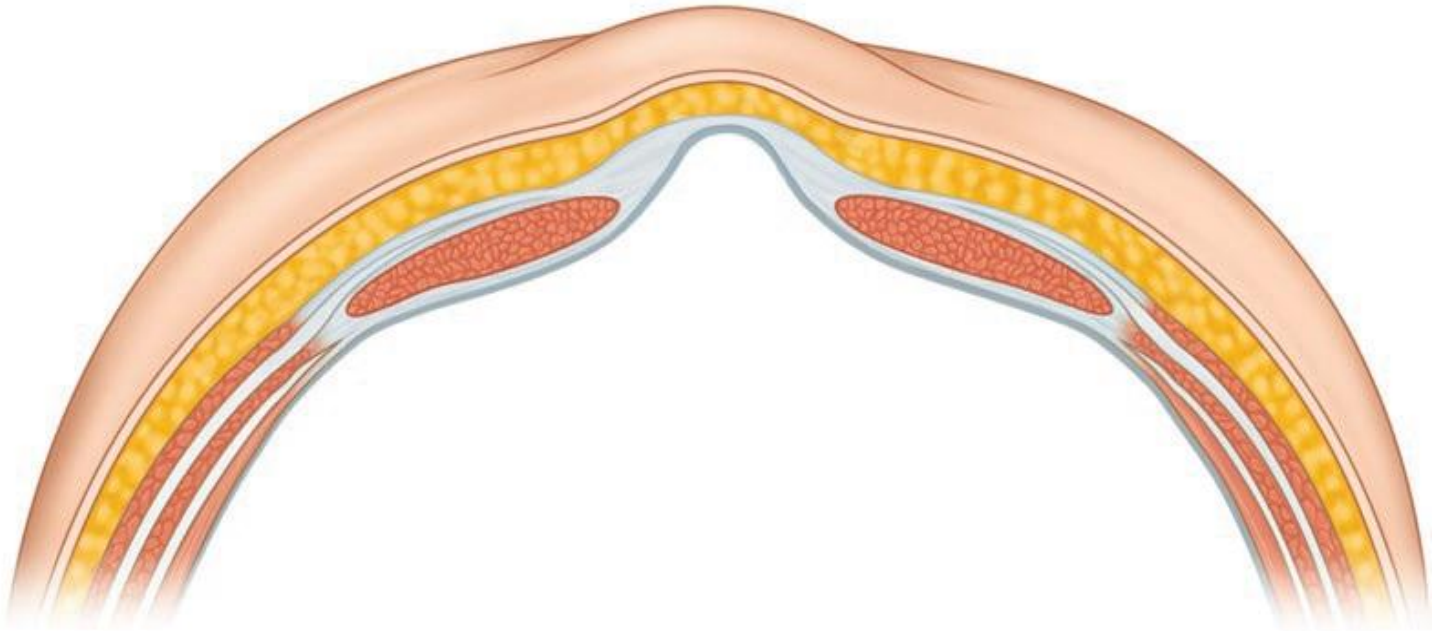
产后腹直肌分离症：康复治疗

• 没有统一标准 • 无法完全治愈

- Benjamin DR. Effects of exercise on diastasis of the rectus abdominis muscle in the antenatal and postnatal periods: a systematic review. Physiotherapy. 2014.
- Acharry N. Abdominal exercise with bracing, a therapeutic efficacy in reducing diastasis-recti among postpartal females. Int J Physiother Res. 2015.
- Khandale SR. Effects of abdominal exercises on reduction of diastasis recti in postnatal women. Int J Health Sci Res. 2016.
- Awad M, Morsy M, Mohamed M, et al. Efficacy of Tupler Technique on Reducing Post Natal Diastasis Recti: A Controlled Study. Br J Appl Sci Technol. 2016.

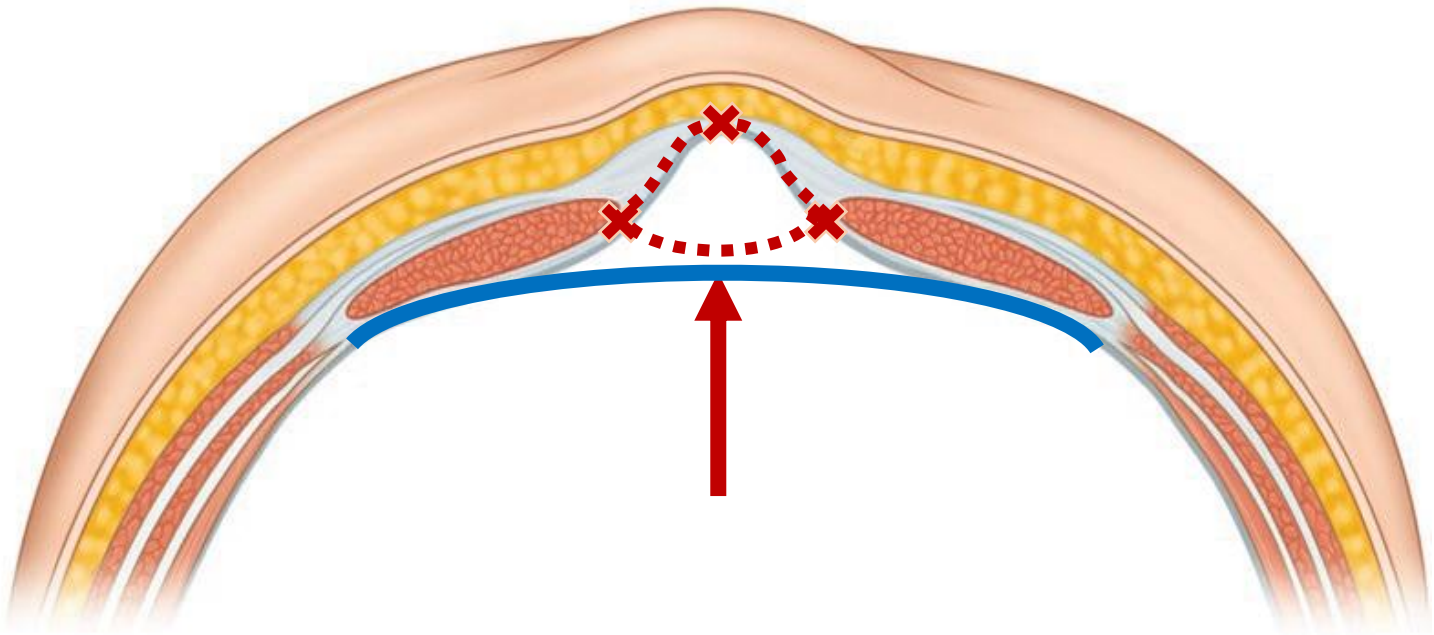
产后腹直肌分离症：手术治疗

- *Laparoscopy*
- *Endoscopy*
- *Plastic Surg*



产后腹直肌分离症：手术治疗

- *Laparoscopy*



产后腹直肌分离症：手术治疗

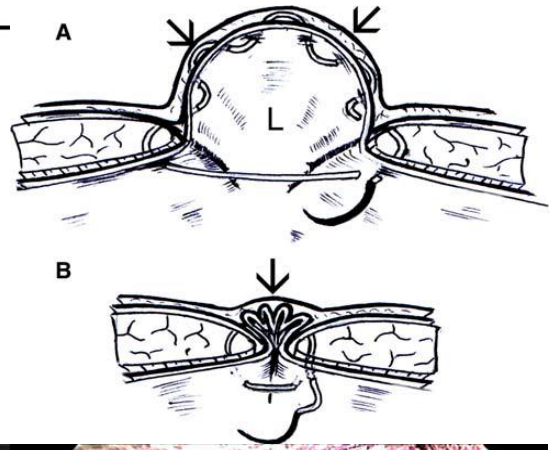
Hernia (2009) 13:287–292
DOI 10.1007/s10029-008-0464-z

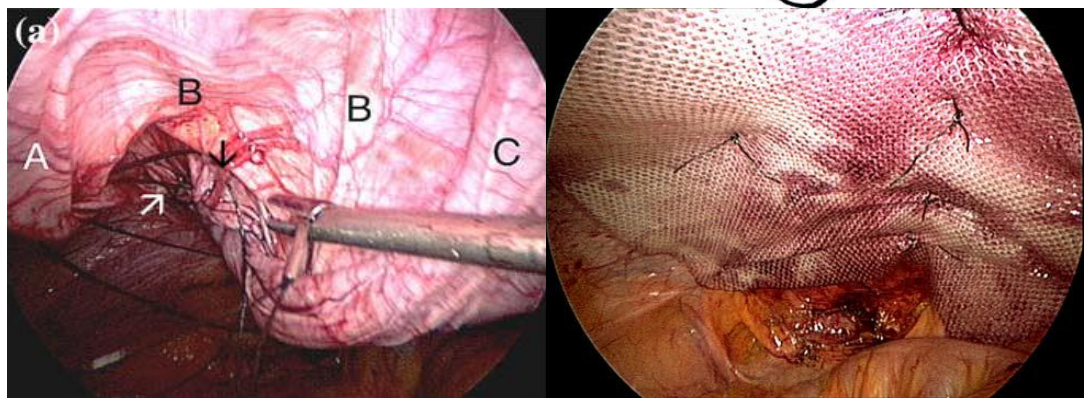
ORIGINAL ARTICLE

Laparoscopic repair of diastasis recti using the 'Venetian blinds' technique of plication with prosthetic reinforcement: a retrospective study

C. Palanivelu · M. Rangarajan · P. A. Jategaonkar · V. Amar · K. S. Gokul · B. Srikanth

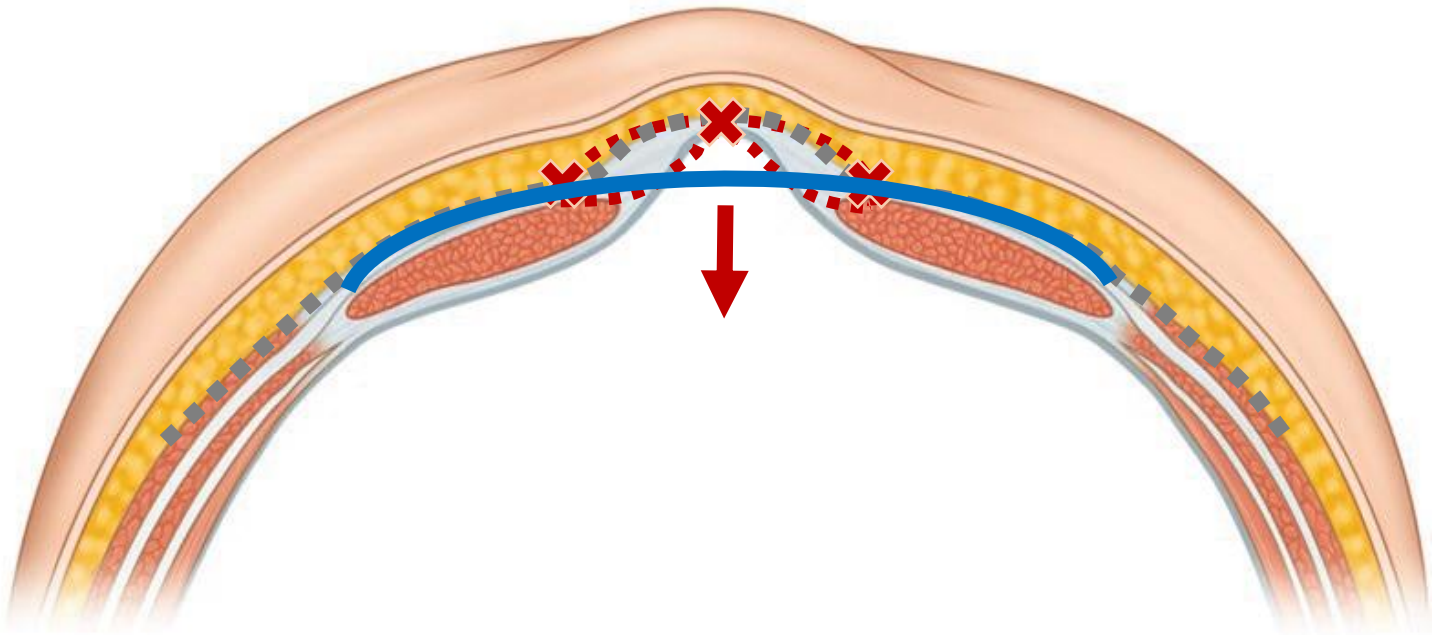
Received: 22 July 2008 / Accepted: 5 December 2008 / Published online: 12 February 2009





产后腹直肌分离症：手术治疗

- *Endoscopy*



产后腹直肌分离症：手术治疗

original article

Eur Surg (2017) 49:71–75
DOI 10.1007/s10353-017-0473-1

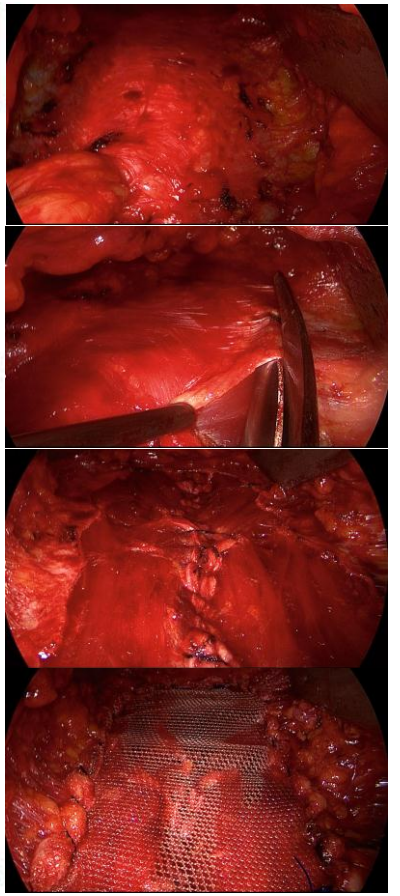
CrossMark

european surgery
ACA Acta Chirurgica Austriaca

Endoscopic-assisted linea alba reconstruction

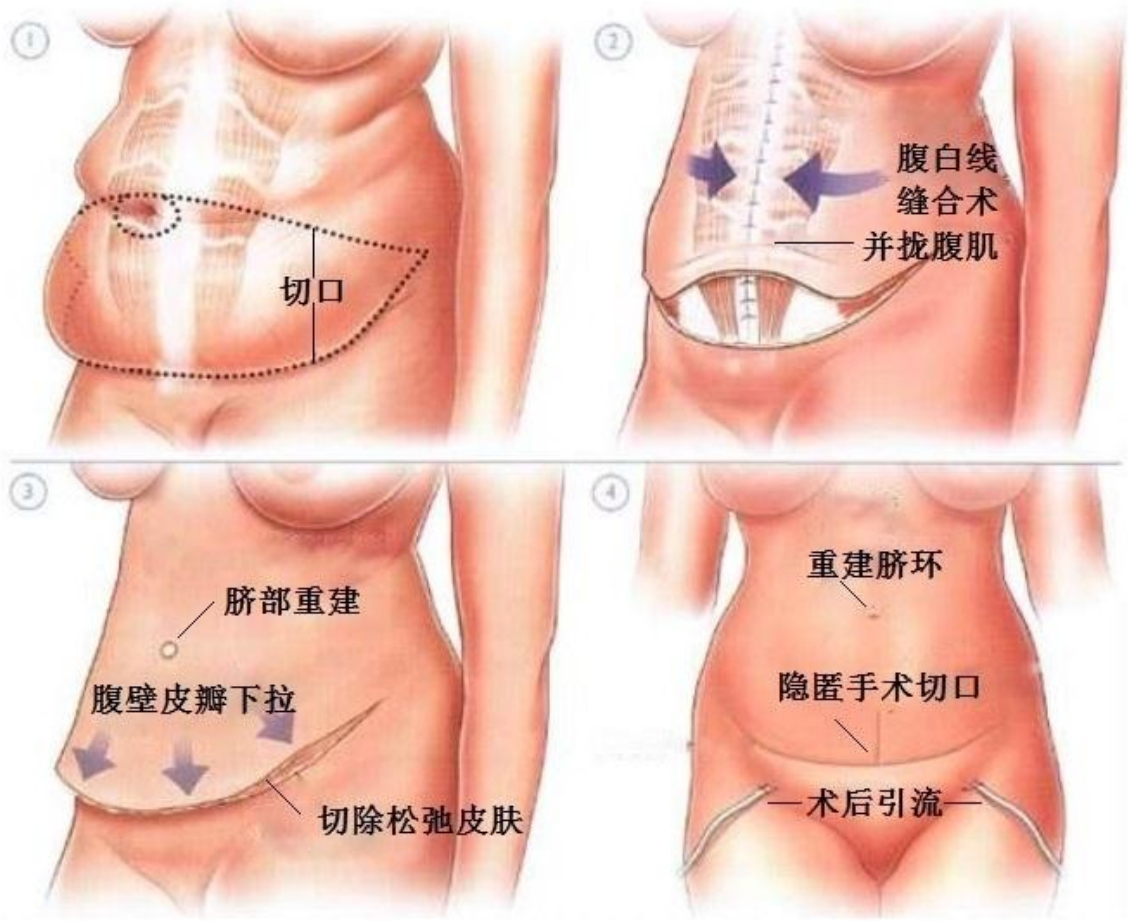
New technique for treatment of symptomatic umbilical, trocar, and/or epigastric hernias with concomitant rectus abdominis diastasis

Ferdinand Köckerling · Marinos Damianos Botsinis · Christine Rohde · Wolfgang Reinpold · Christine Schug-Pass

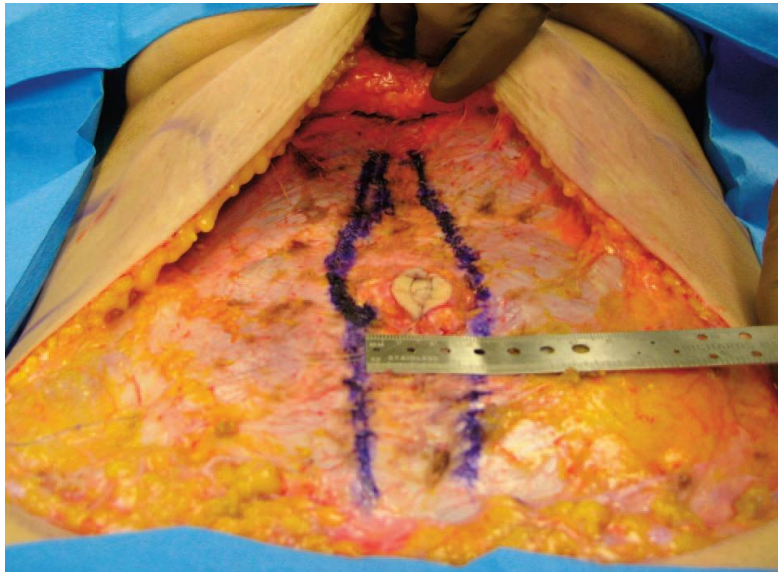


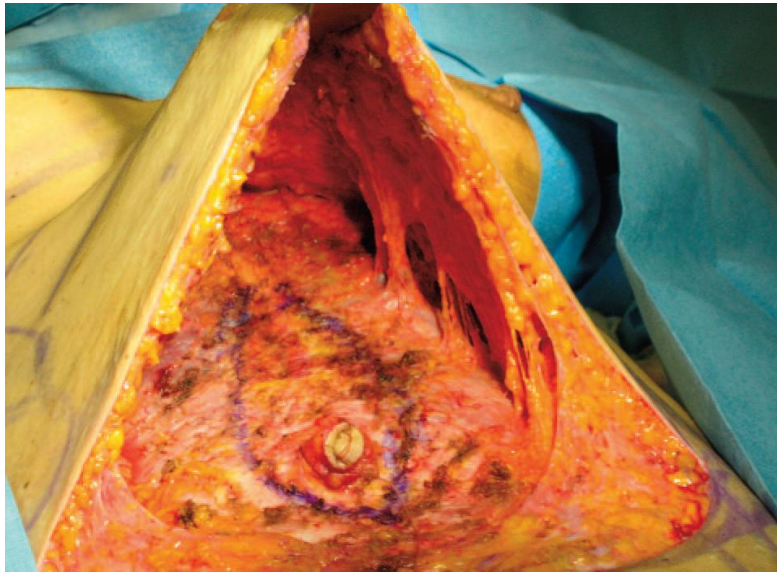
产后腹直肌分离症：手术治疗

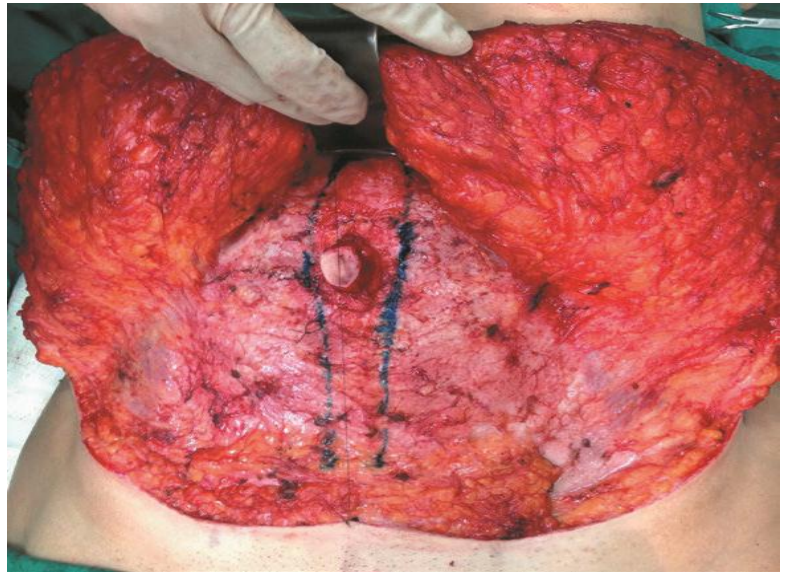
- ***Plastic Surg***



产后腹直肌分离症：手术治疗







- Brauman D. Diastasis Recti: Clinical Anatomy. Plast Reconstr Surg. 2008

产后腹直肌分离症：手术治疗

Hernia (2011) 15:607–614
DOI 10.1007/s10029-011-0839-4

REVIEW

A systematic review on the outcomes of correction of diastasis of the recti

F. Hickey · J. G. Finch · A. Khanna

Received: 8 February 2011 / Accepted: 29 May 2011 / Published online:

Results Seven studies report that patient satisfaction was high following surgery. The most common complication seen was the development of a seroma. Other common complications included haematomas, minor skin necrosis, wound infections, dehiscence, post-operative pain, nerve damage and recurrence, the rate of which may be as high as 40%.

产后腹直肌分离症：诊治误区(1)

Classification of Rectus Diastasis—A Proposal by the German Hernia Society (DHG) and the International Endohernia Society (IEHS)

Wolfgang Reinpold[1†], Ferdinand Köckerling[2†], Reinhard Bittner[3], Joachim Conze[4], René Fortelny[5], Andreas Koch[6], Jan Kukleta[7], Andreas Kuthe[8], Ralph Lorenz[9] and Bernd Stechemesser[10]*

手术治疗

Surg Endosc (2017) 31:4934–4949
DOI 10.1007/s00464-017-5607-9

REVIEW

The general surgeon's perspective of rectus diastasis. A systematic review of treatment options

Elwin H. H. Mommers[1] · Jeroen E. H. Ponten[2] · Aminah K. Al Omar[1] · Tammo S. de Vries Reilingh[3] · Nicole D. Bouvy[1] · Simon W. Nienhuijs[2]

- 待纠正误区1：

产后腹直肌分离症

≠

腹壁疝

- 建议患者手术治疗
- 常规使用补片修补
- 手术本身二次损伤

疝和腹壁外科：补片修补的隐患！

JAMA | Original Investigation

Long-term Recurrence and Complications Ass With Elective Incisional Hernia Repair

Dunja Kokotovic, MB; Thue Bisgaard, MD, DMSc; Frederik Helgstrand, MD, DMSc

IMPORTANCE Prosthetic mesh is frequently used to reinforce the repair of abdominal wall incisional hernias. The benefits of mesh for reducing the risk of hernia recurrence or the long-term risks of mesh-related complications are not known.

OBJECTIVE To investigate the risks of long-term recurrence and mesh-related complications following elective abdominal wall hernia repair in a population with complete follow-up.

DESIGN, SETTING, AND PARTICIPANTS Registry-based nationwide cohort study including all elective incisional hernia repairs in Denmark from January 1, 2007, to December 31, 2010. A total of 3242 patients with incisional repair were included. Follow-up until November 1, 2014, was obtained by merging data with prospective registrations from the Danish National Patient Registry supplemented with a retrospective manual review of patient records. A 100% follow-up rate was obtained.

Figure 1. Risk of Reoperation for Hernia Recurrence After Index Incisional Hernia Repair

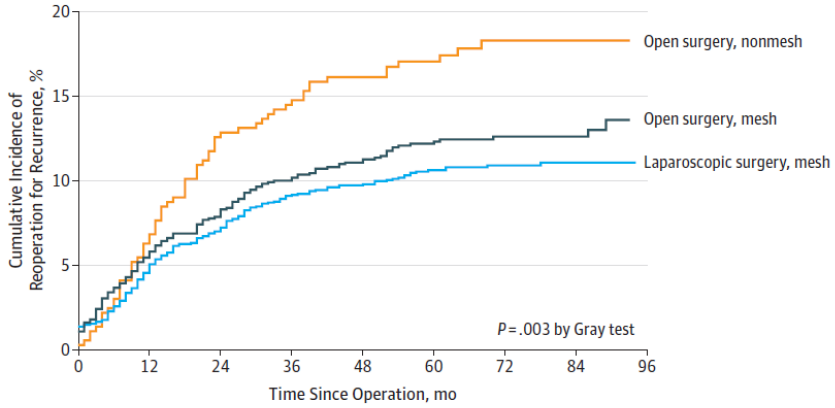
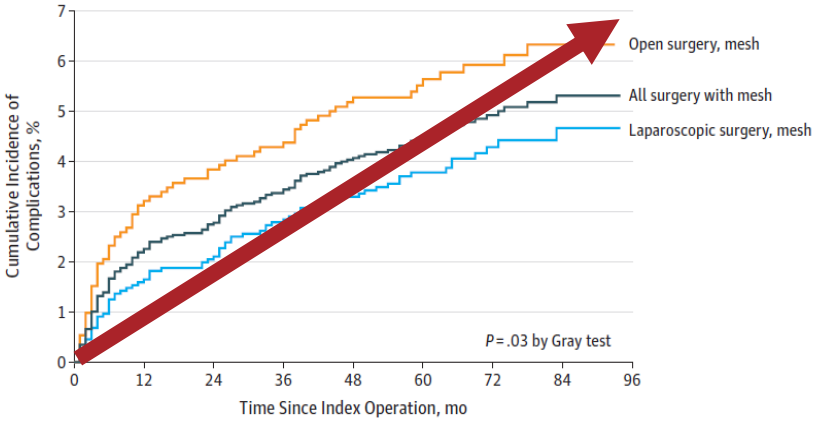
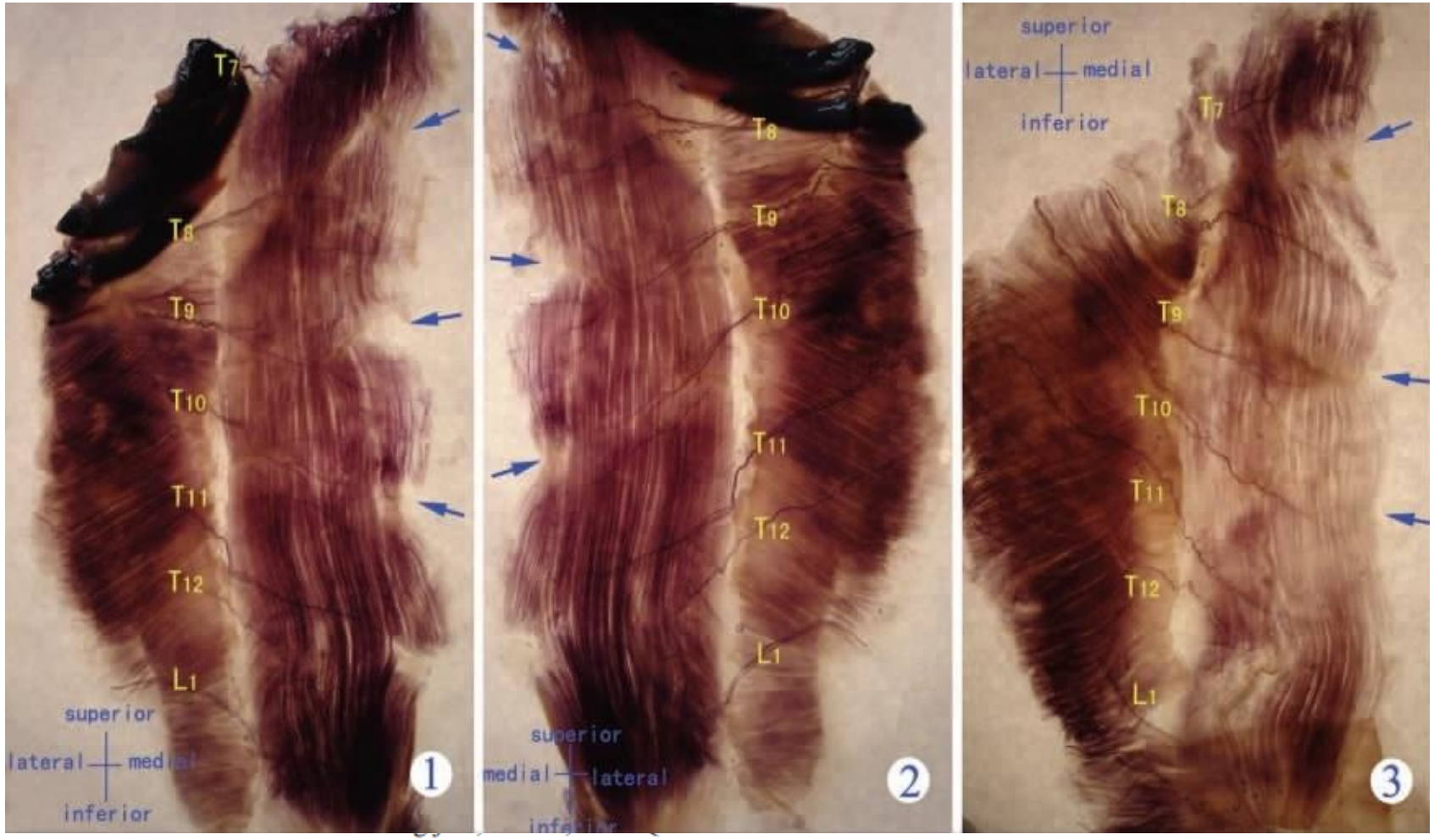


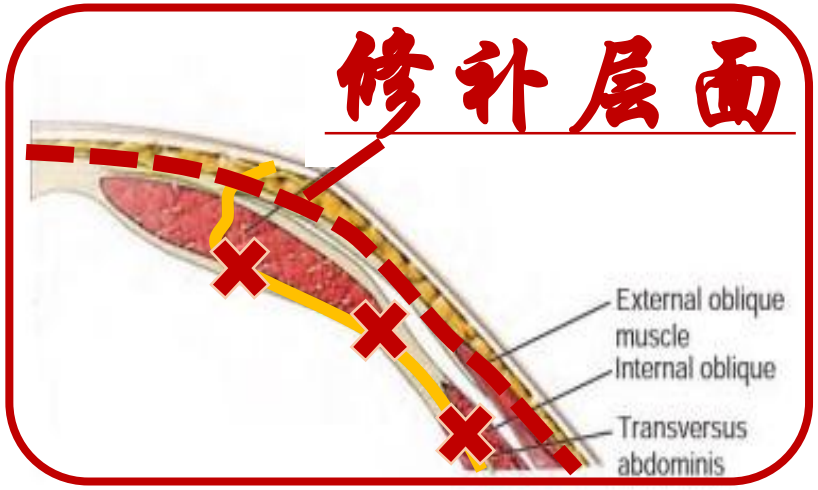
Figure 2. Cumulative Incidence of Mesh-Related Complications Treated by Surgical Intervention After Index Incisional Hernia Repair



No. at risk								
Laparoscopic mesh	1757	1620	1532	1455	1332	942	578	260
Open mesh	1119	1000	942	880	790	556	370	211
All mesh	2876	2620	2474	2335	2122	1498	948	471

疝和腹壁外科：手术与解剖！！！





肌深面，自上而下在鞘内走行的长度逐渐增加，走行约1～4 cm 后在肌深面肌宽的中、外 1/3 交界处入肌，各神经入肌点呈线形排列，少数分支在肌深面外侧 1/3 入肌。各神经主干入肌点间距为(3.14±1.03)cm。

在 4 个肌腹的腹直肌中，第 1 肌腹主要受第 7 胸神经前支支配，第 2 肌腹主要受第 8 胸神经前支支配，第 3 肌腹主要受第 9 胸神经前支支配，第 4 肌腹主要受第 10~12 胸神经前支与第 1 腰神经前支支配 (图 1~3) 。

产后腹直肌分离症：诊治误区(2)

ELSEVIER

Physiotherapy

Physiotherapy 100 (2014) 1–8

Systematic review

Effects of exercise on diastasis of the rectus abdominis muscle in the antenatal and postnatal periods: a systematic review☆

D.R. Benjamin[a,*], A.T.M. van de Water[b], C.L. Peiris[a,b]

[a] Physiotherapy Department, Angliss Hospital, Eastern Health, Australia
[b] Department of Physiotherapy, School of Allied Health, La Trobe University, Victoria, Australia

康复治疗

Systematic review

Relationship between diastasis of the rectus abdominis muscle (DRAM) and musculoskeletal dysfunctions, pain and quality of life: a systematic review

Deenika R. Benjamin[a,*], Helena C. Frawley[b,c], Nora Shields[a], Alexander T.M. van de Water[d], Nicholas F. Taylor[a,e]

[a] Department of Rehabilitation, Nutrition & Sport, School of Allied Health, La Trobe University, Victoria, Australia
[b] School of Primary and Allied Health Care, Faculty of Medicine, Nursing and Health Sciences, Monash University, Victoria, Australia
[c] Centre of Allied Health Research & Education, Cabrini Hospital, Victoria Australia
[d] Department of Physiotherapy and Lectorate of Health and Movement, Academy of Health Sciences, Saxion University of Applied Sciences, Netherlands
[e] School of Allied Health, Allied Health Clinical Research Office, Eastern Health, Victoria, Australia

- 待纠正误区 2：

康复医学治疗方法

≠

包治百病

- 如何科学的康复理疗
- 能缓解患者部分症状
- 不解决解剖结构问题

产后腹直肌分离症：手术 or 康复

Operative correction of abdominal rectus diastasis (ARD) reduces pain and improves abdominal wall muscle strength: A randomized, prospective trial comparing retromuscular mesh repair to double-row, self-retaining sutures

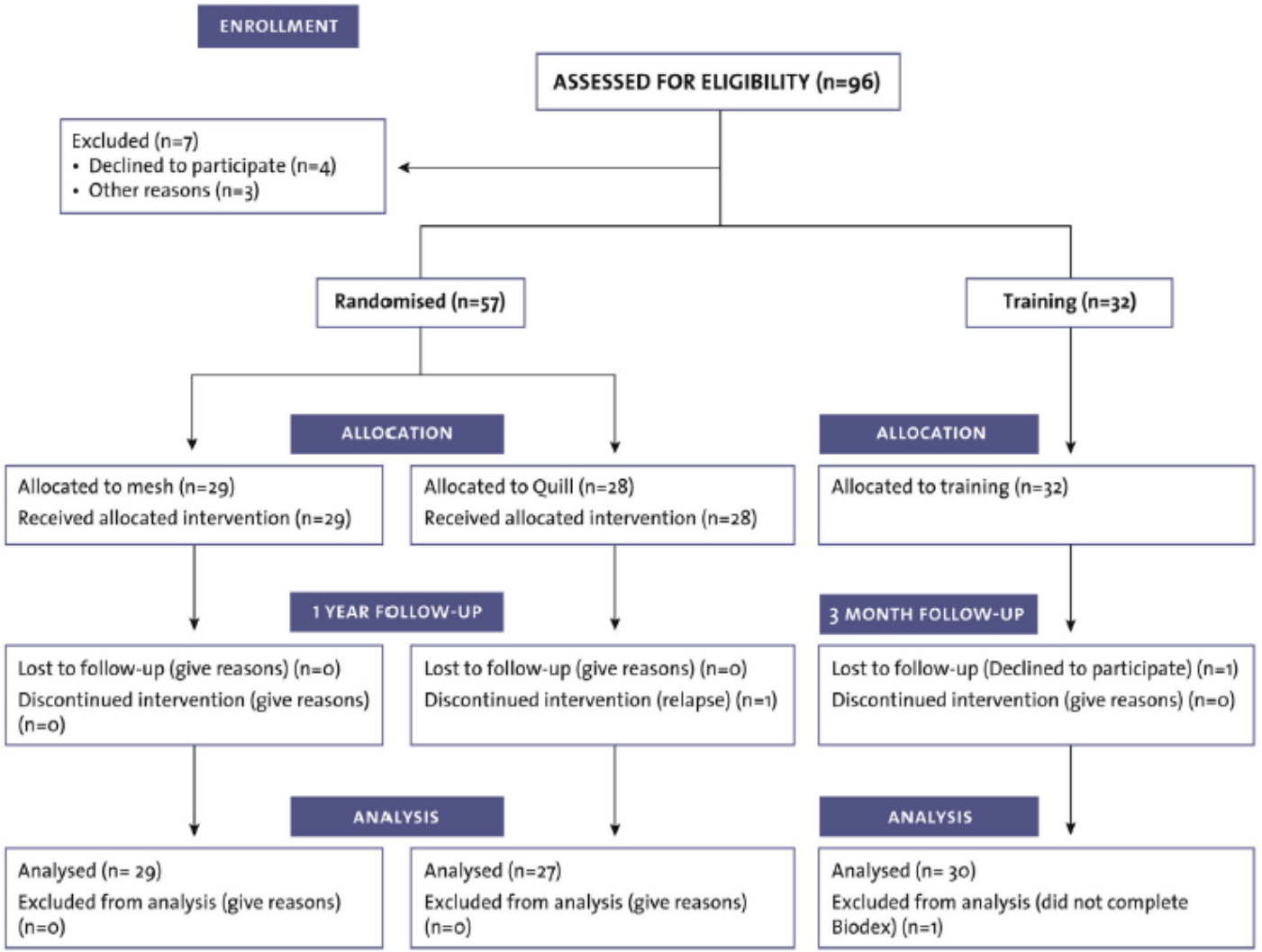
Peter Emanuelsson, MD, PhD,[a] Ulf Gunnarsson, MD, PhD,[c] Ursula Dahlstrand, MD, PhD,[b] Karin Strigård, MD, PhD,[c] *and* Birgit Stark, PhD,[a] *Solna and Umeå, Sweden*

Inclusion and exclusion criteria

Inclusion criteria
ARD width ≥3 cm
>18 yr old
Abdominal wall discomfort or tenderness
Wants abdominal wall reconstruction
For women; ≥1 pregnancy, 1 yr after childbirth
Exclusion criteria
Ongoing pregnancy
Ongoing breastfeeding
Immunosuppressive therapy
Smoking

- 共分三组
- 手术两组：补片/缝合
- 康复一组：康复/锻炼

产后腹直肌分离症：手术 or 康复



The study was approved by the Regional Ethics Review Board in Stockholm (D.nr. 2009/227-31, 2011/1186-32). Approval included a clause that patients in the training arm who were not satisfied with the outcome in terms of functional improvement would be offered operative correction. Written informed consent was obtained prior to inclusion. The trial was registered on ClinicalTrial.gov with the number 2009/227-31/3/PE/96.

The present study received grants from Stockholm County Council. The sponsors had no role in study design, data collection, data analysis, data interpretation, or in the writing of the report. This study was run solely as an academic trial. There was no support from manufacturers or distributors. The ethical standard followed the principles of the Declaration of Helsinki.

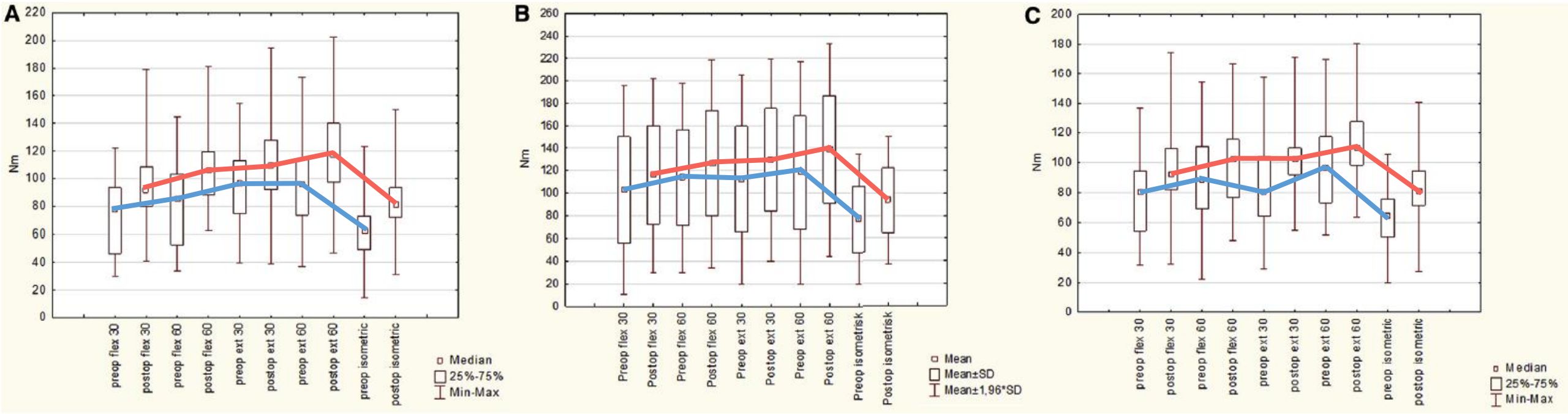
Perception of pain and restriction of activities. The VHPQ results are shown in Table III. Operated patients were improved in terms of abdominal wall pain at follow-up compared to pre-operative data (VHPQ). There was no difference between the operative groups. Even though improvement of the ARD was seen at 3 months, discomfort and pain was still perceived during sports and daily activities according to the VHPQ (Table IV). Patients in the training group improved in all VHPQ modalities except "pain right now."

SF36

VHPQ

产后腹直肌分离症：手术 or 康复

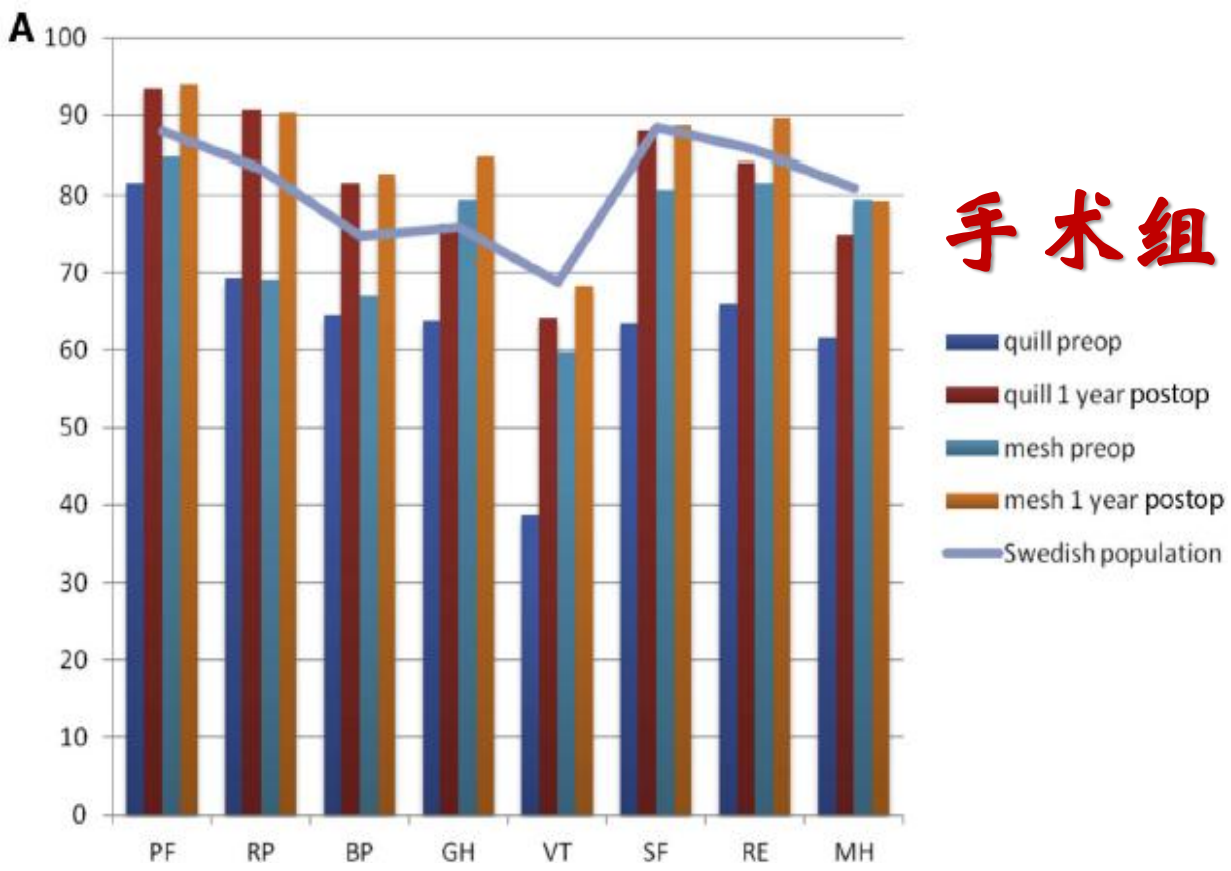
缝合组　　补片组　　康复组



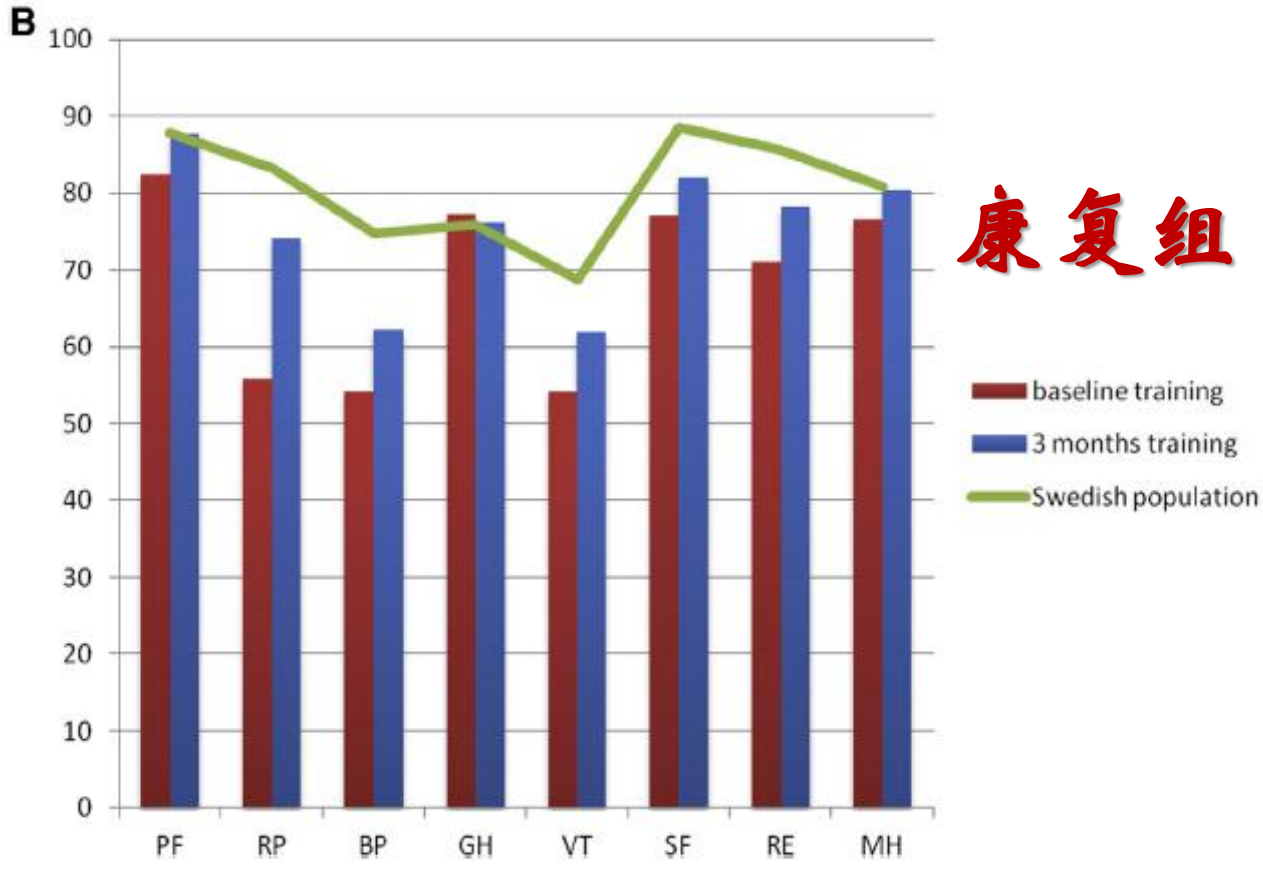
BIODEX® System 4 Pro

治疗前：——　　治疗后：——

产后腹直肌分离症：手术 or 康复



手术组



康复组

(*A*) SF-36 preoperative and 1-year follow-up after the operation. *PF*, physical function; *RP*, physical role functioning; *BP*, bodily pain; *GH*, general health; *VT*, vitality; *SF*, social functioning; *RE*, emotional role functioning; *MH*, mental health. (*B*) SF-36 baseline and after 3 months training.

产后腹直肌分离症：手术 or 康复

The VHPQ results for preoperative and 1-year follow-up after the operation, pretraining, and 3 months after completion of the training program

	Preop		*Postop 1 yr*		*Pretraining*	*Training 3 mo*
VHPQ	*Quill* (n = 28)	*Mesh* (n = 29)	*Quill* (n = 27)	*Mesh* (n = 29)	(n = 30)	(n = 29)
Pain right now ≤1	21	22	26	24	19	16
Pain right now >1	7	6	1	5	11	12
Pain last week >1	12	11	1	4	20	15
Difficulty rising from chair	3	1	1	0	6	4
Difficulty sitting	7	2	0	2	6	3
Difficulty standing	6	1	0	2	13	3
Difficulty climbing stairs	6	2	0	0	13	0
Difficulty driving a car	0	1	0	2	2	1
Difficulty performing sports and physical activity	13	12	3	6	15	6

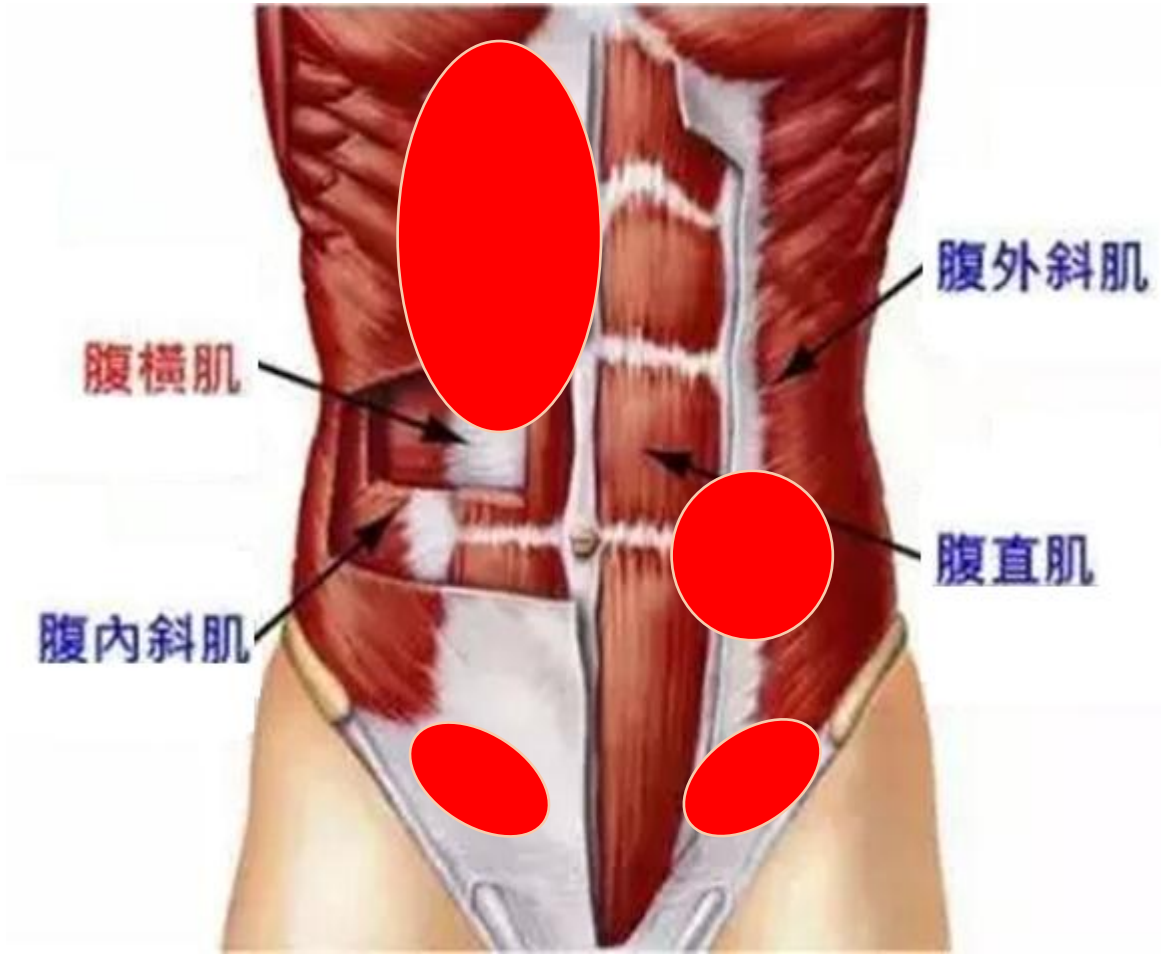
- **Emanuelsson P, Operative correction of abdominal rectus diastasis (ARD) reduces pain and improves abdominal wall muscle strength: A randomized, prospective trial comparing retromuscular mesh repair to double-row, self-retaining sutures. Surgery. 2016.160(11): 1367-75.**

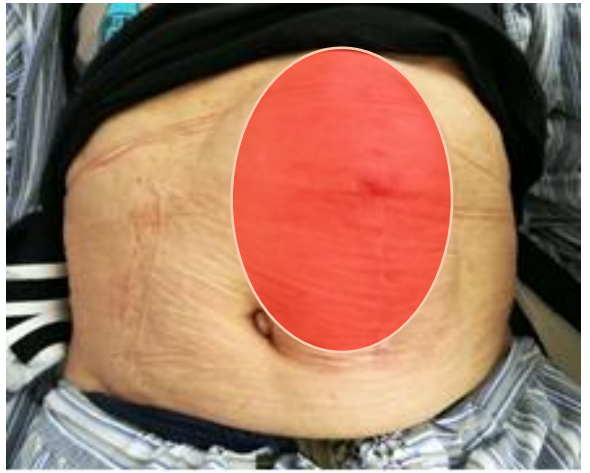
第三部分

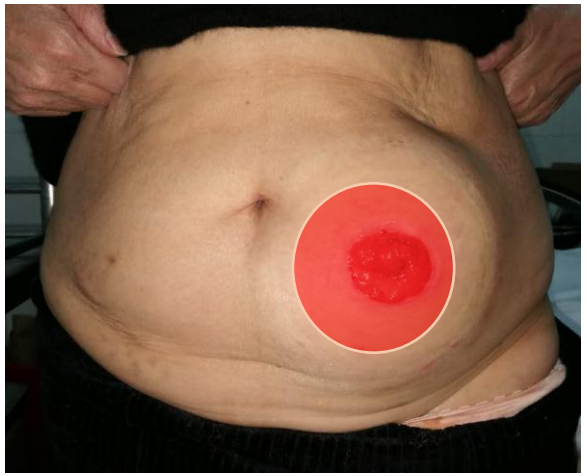
华山：经验与分享


华山医院

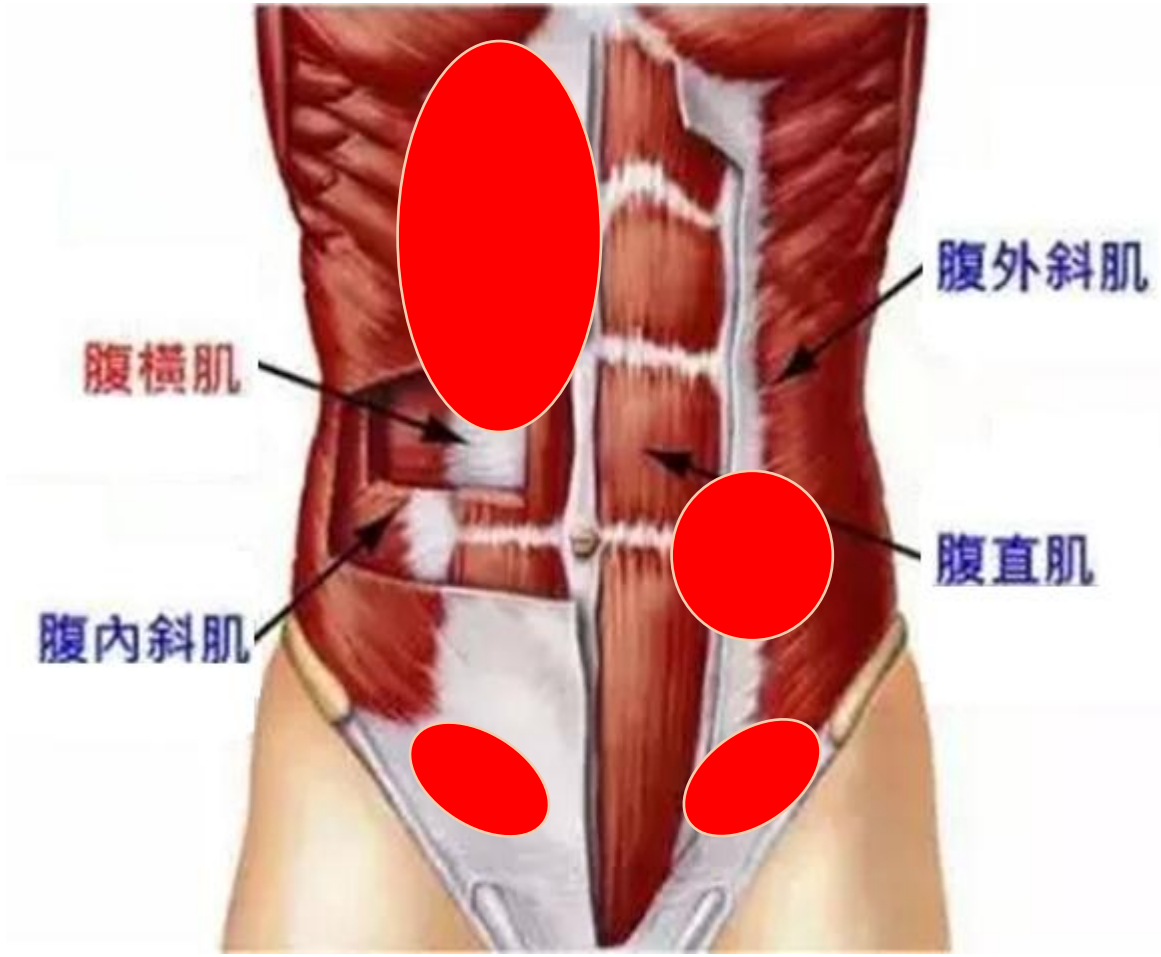
华山医院普外科：疝和腹壁外科

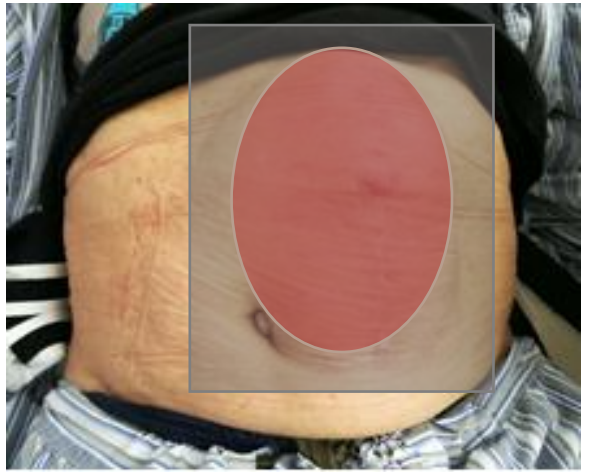


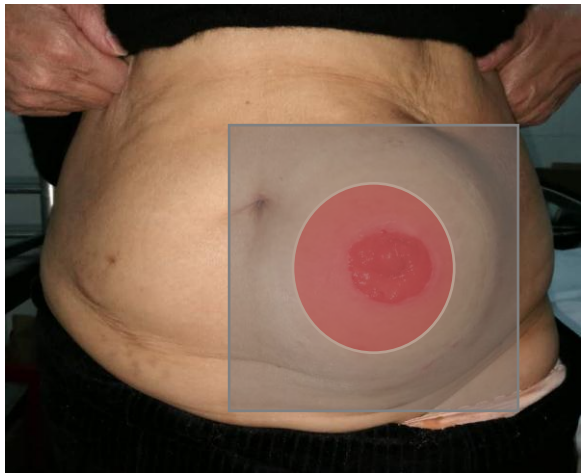




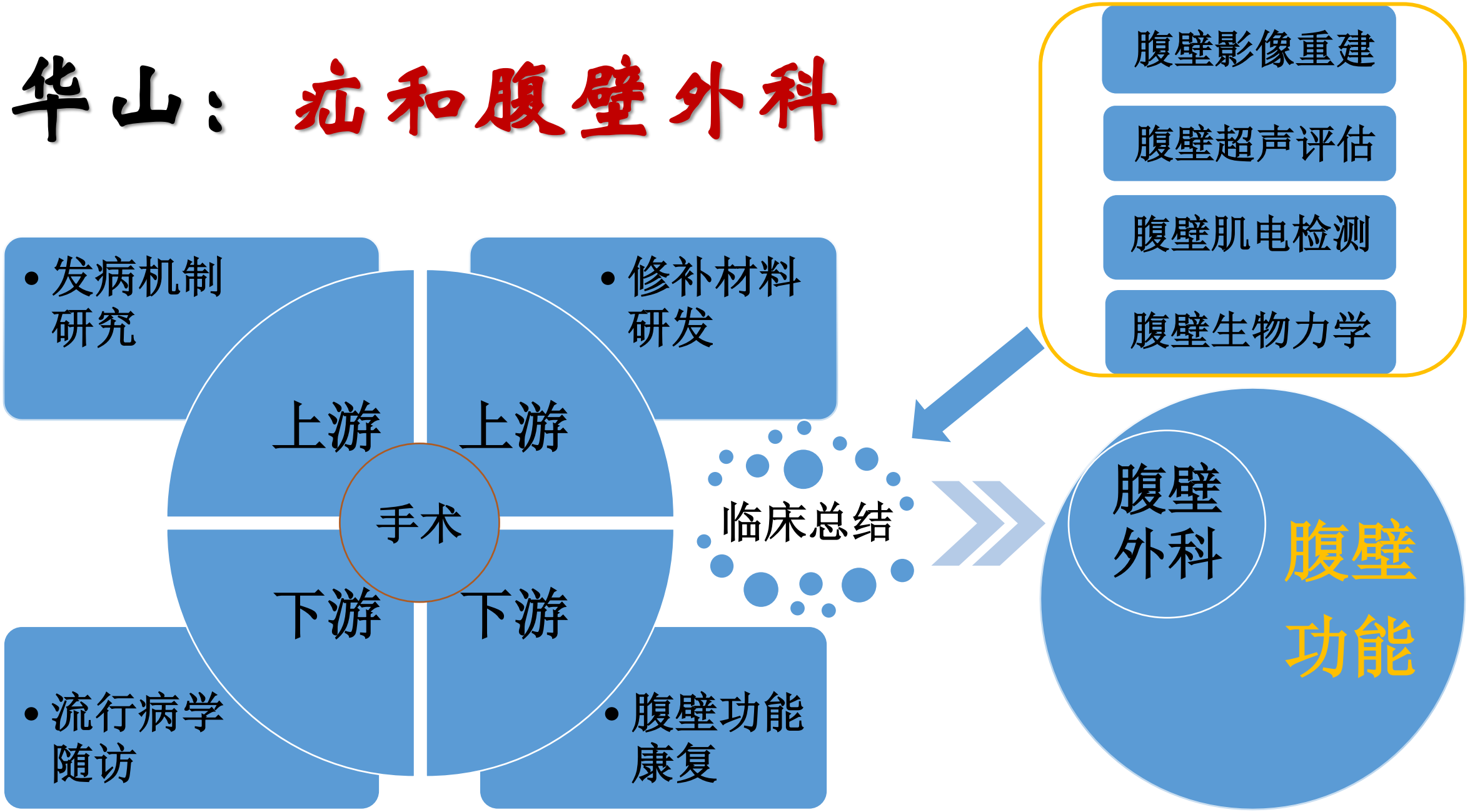
华山医院普外科：疝和腹壁外科







华山：疝和腹壁外科


腹壁影像重建
腹壁超声评估
腹壁肌电检测
腹壁生物力学
• 发病机制研究
• 修补材料研发
上游
上游
手术
下游
下游
• 流行病学随访
• 腹壁功能康复
临床总结
腹壁外科
腹壁功能

华山医院普外科：疝和腹壁外科

- 牢牢扎根于：前腹壁肌群及上游神经调控！

华山医院普外科：疝和腹壁外科

诊　　治

华山医院普外科：疝和腹壁外科

诊

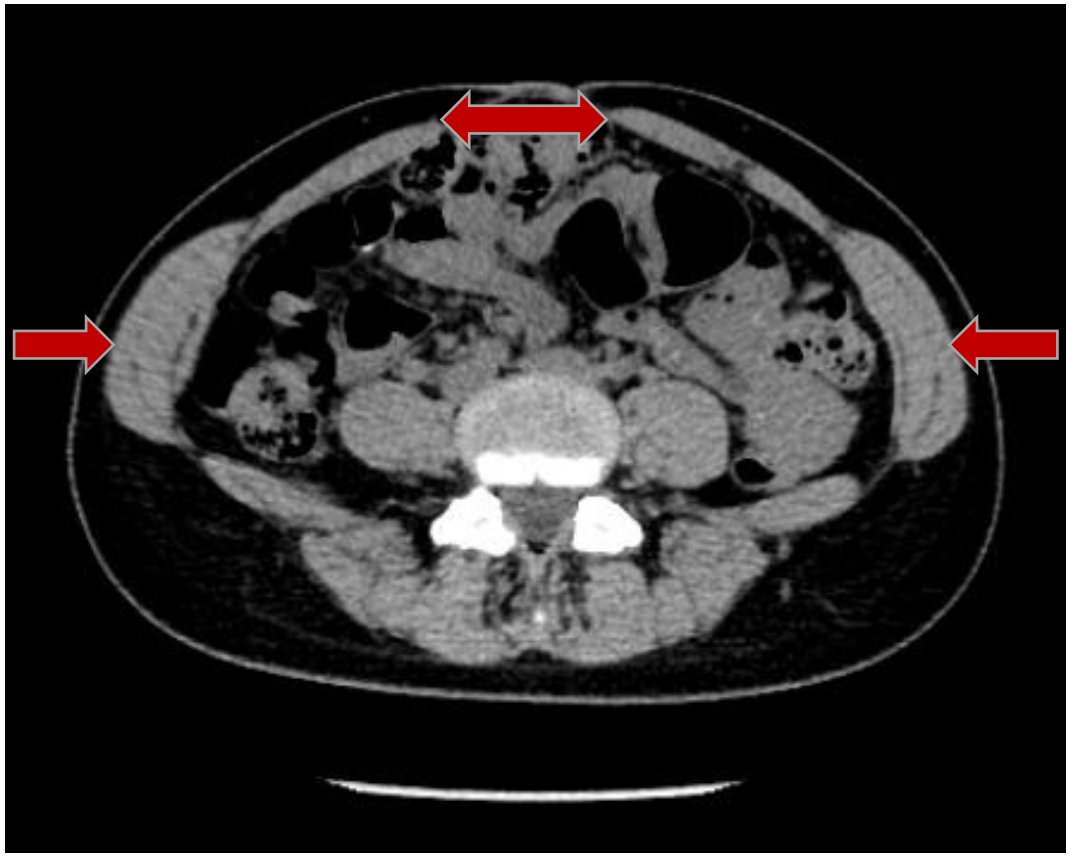
Table 28.1 European Hernia Society classification for incisional abdominal wall hernias

European Hernia Society			
Midline	Subxiphoidal	M1	
	Epigastric	M2	
	Umbilical	M3	
	Infraumbilical	M4	
	Suprapubic	M5	
Lateral	Subcostal	L1	
	Flank	L2	
	Iliac	L3	
	Lumbar	L4	
Length	cm	Width	cm
Width	<4 cm	W1	
	4–10 cm	W2	
	>10 cm	W3	
Recurrent hernia?		Yes	No

Adapted from: Muysoms F et al. Classification of primary and incisional abdominal wall hernias. Hernia. 2009;13:407–414

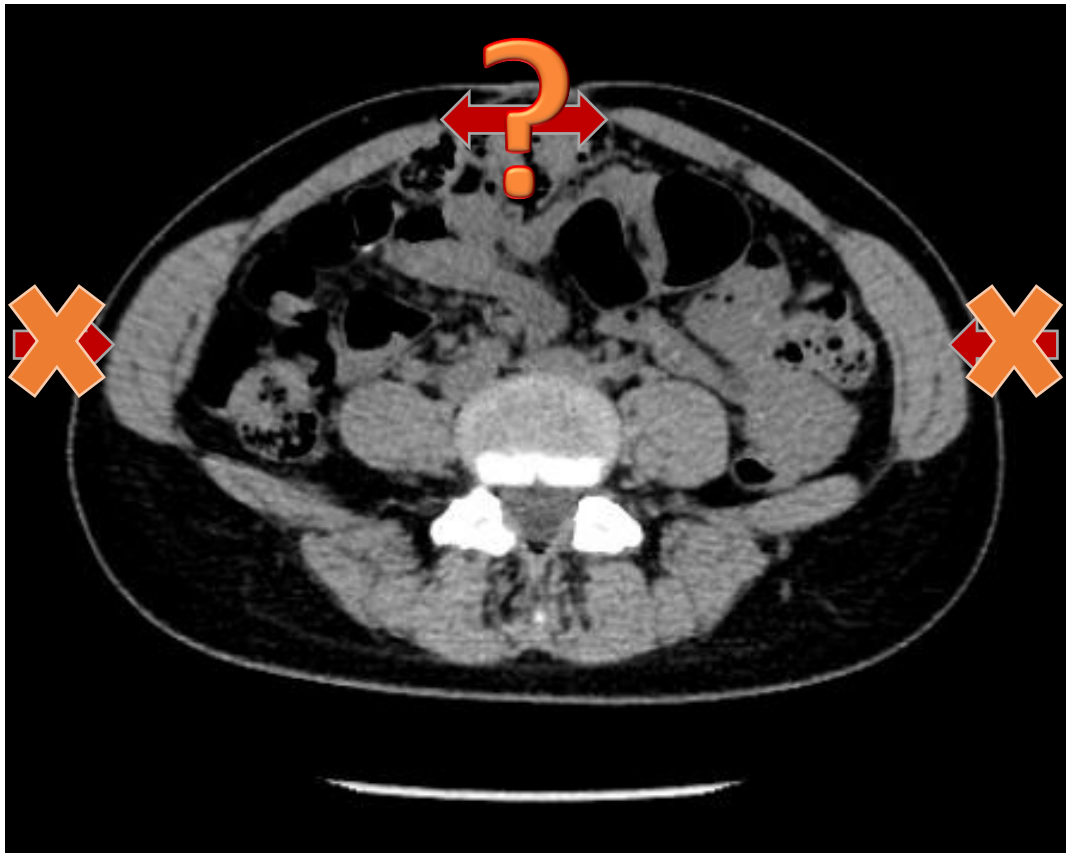
华山医院普外科：疝和腹壁外科

诊



华山医院普外科：疝和腹壁外科

诊



华山医院普外科：疝和腹壁外科

华山医院普外科：疝和腹壁外科

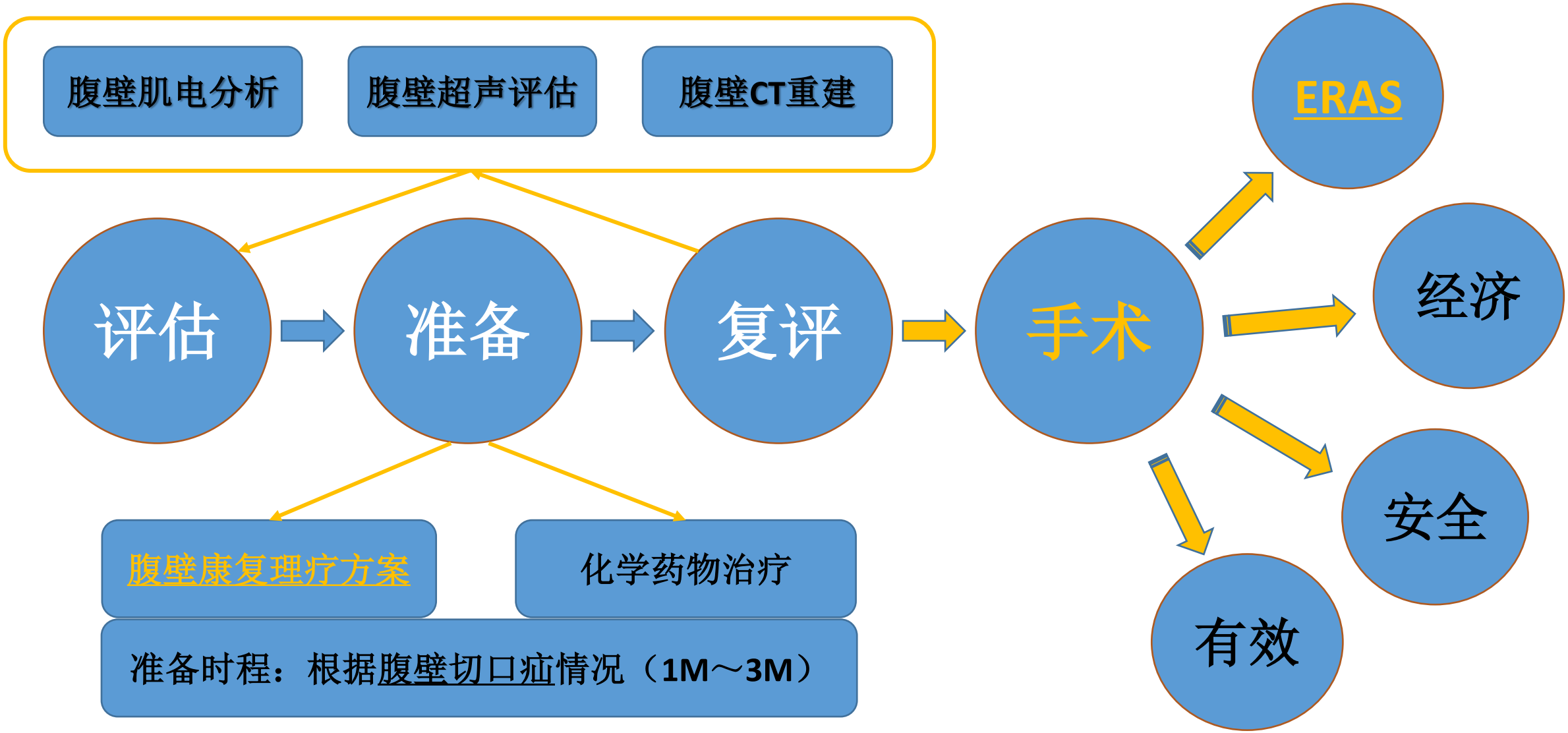
华山医院普外科：疝和腹壁外科

华山医院普外科：疝和腹壁外科

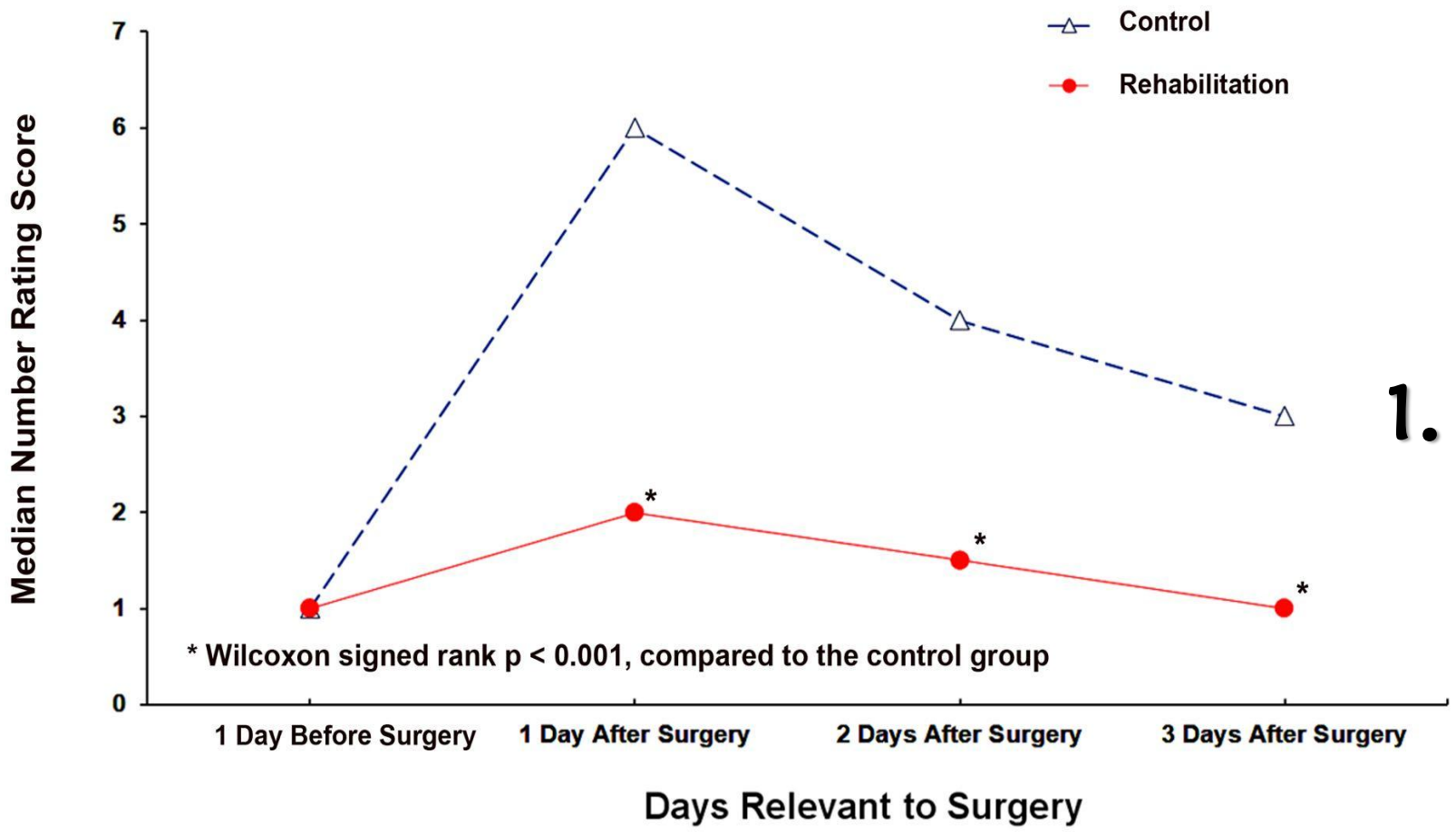
1、腹壁疝降级（大→中）

2、腹壁肌肉条件改善

华山医院普外科：疝和腹壁外科

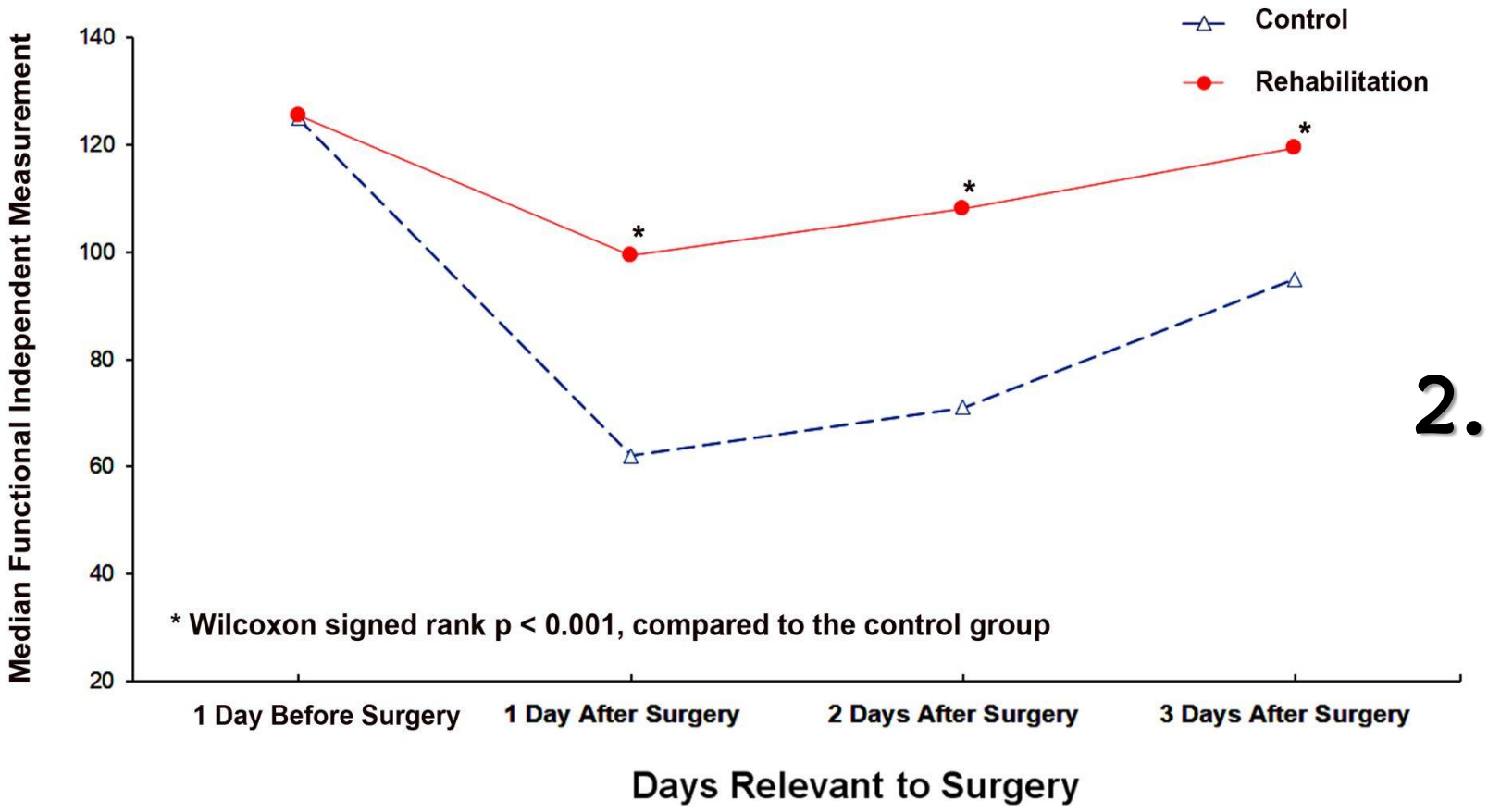


华山医院普外科：疝和腹壁外科



1. 术后疼痛更轻！

华山医院普外科：疝和腹壁外科



2. 术后恢复更快！

华山医院普外科：疝和腹壁外科

腹壁切口疝 → 腹直肌分离

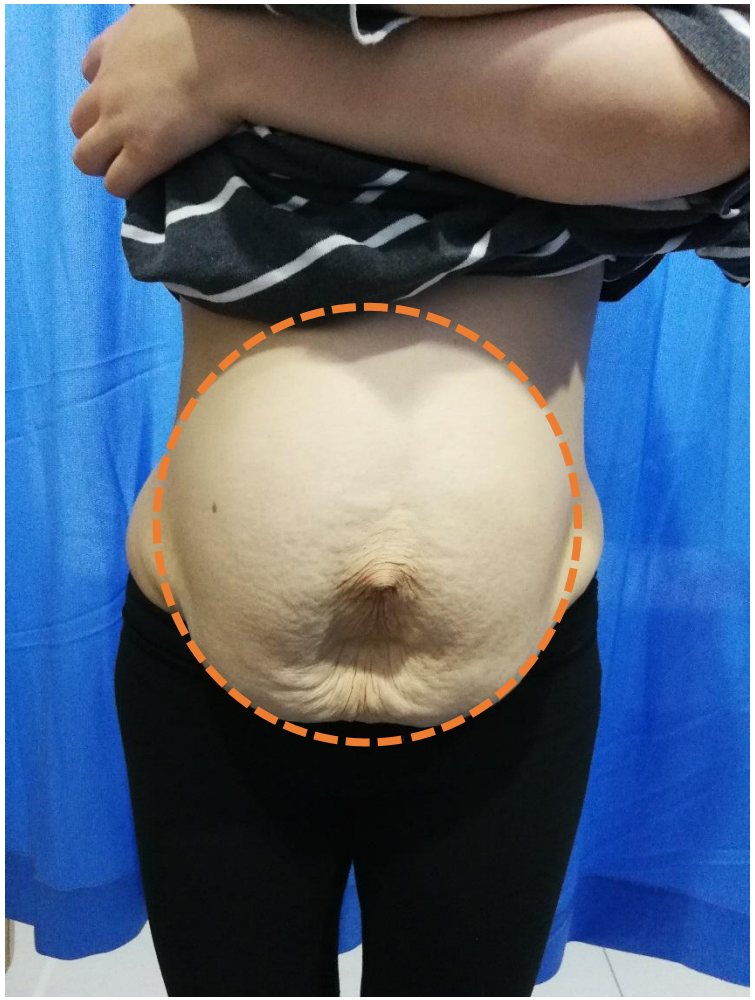
华山经验：产后腹直肌分离症

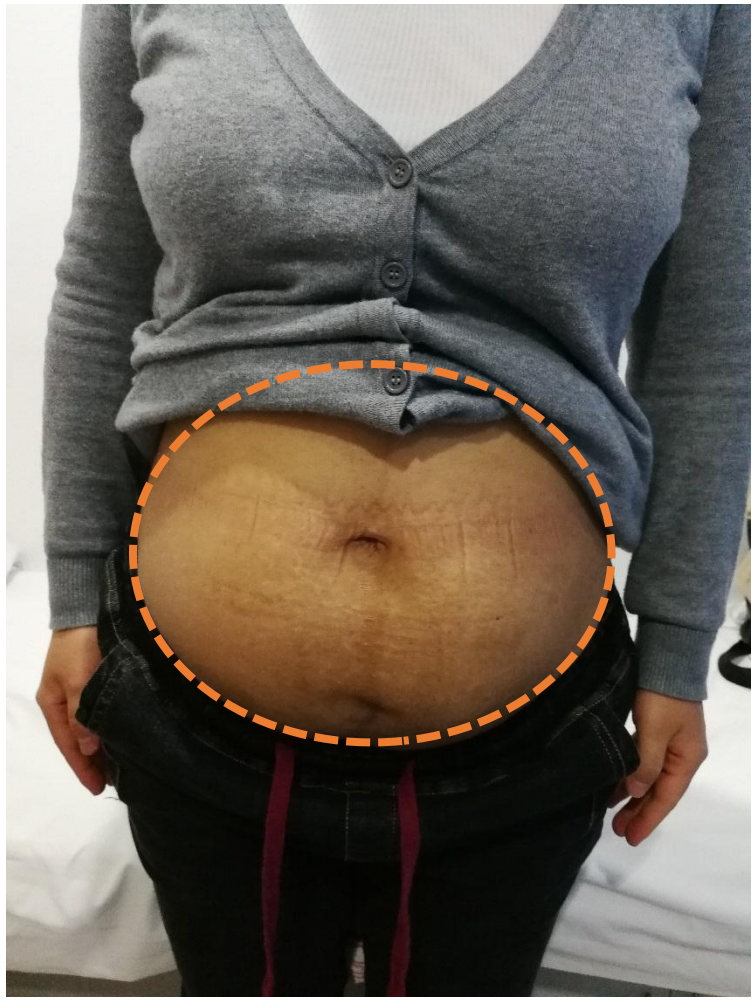





华山经验：产后腹直肌分离症（1）

华山经验：产后腹直肌分离症（2）

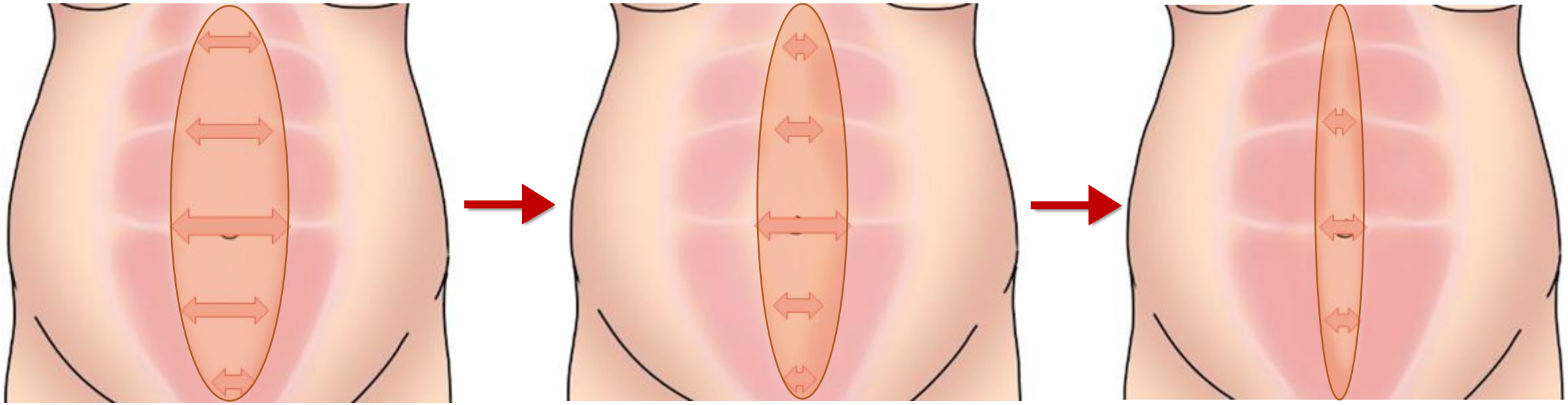




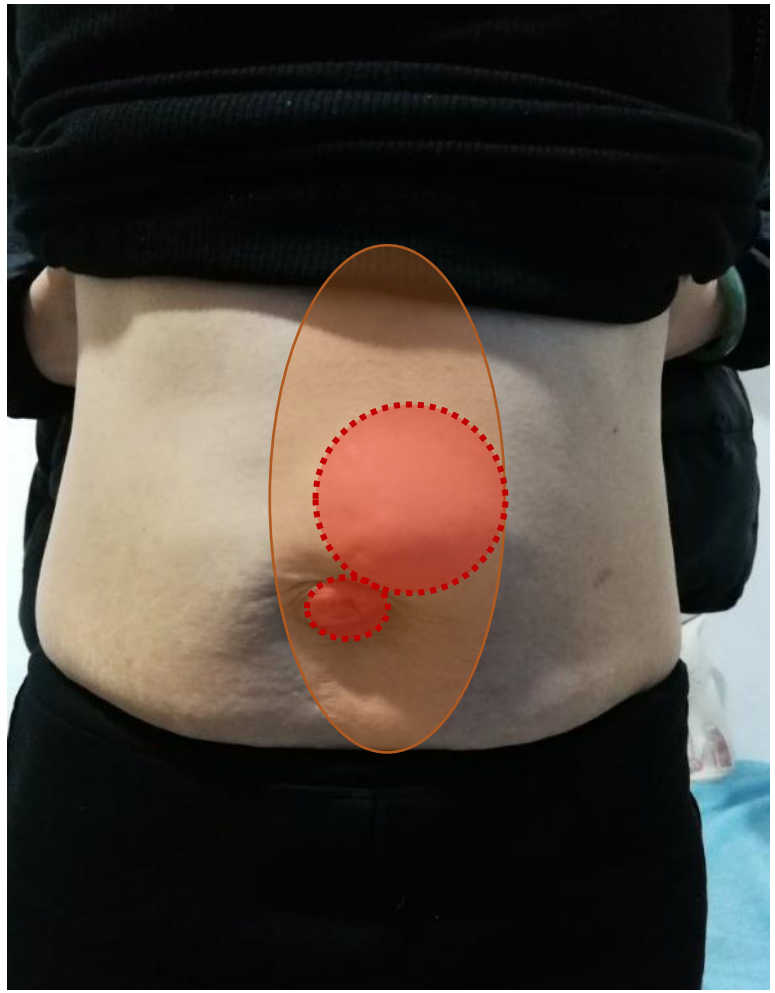
华山诊疗模式：产后腹直肌分离症

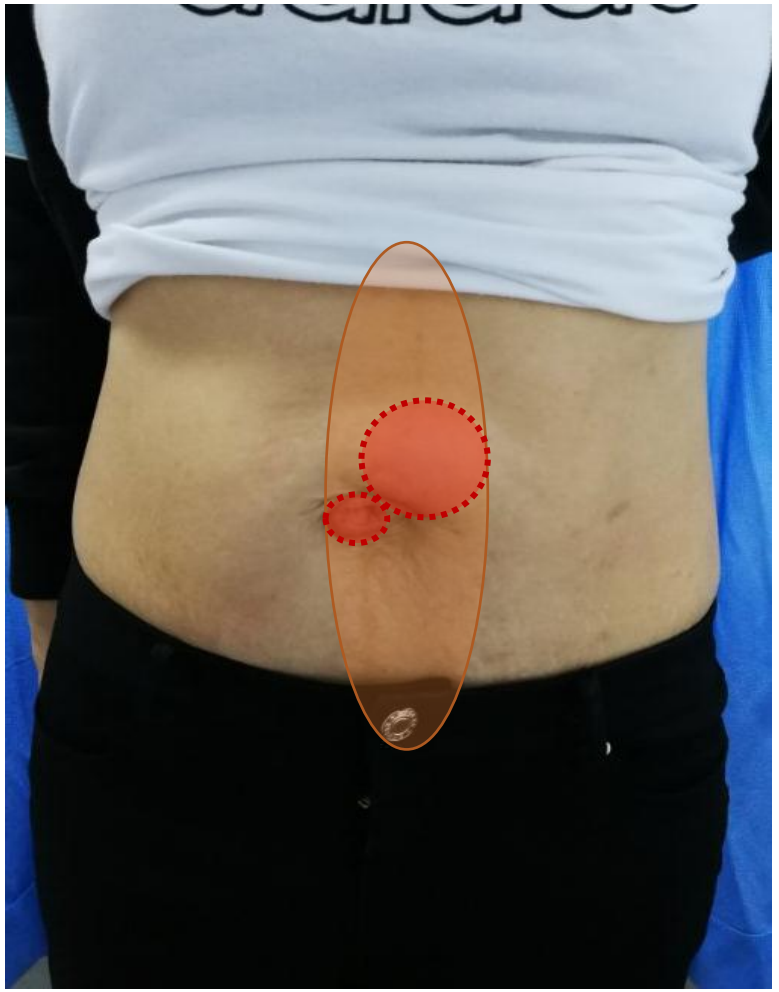
1、产后腹直肌分离症：严重程度降级（大→中→小）

2、腹壁肌肉功能问题：能改善（顺应性、核心肌力）

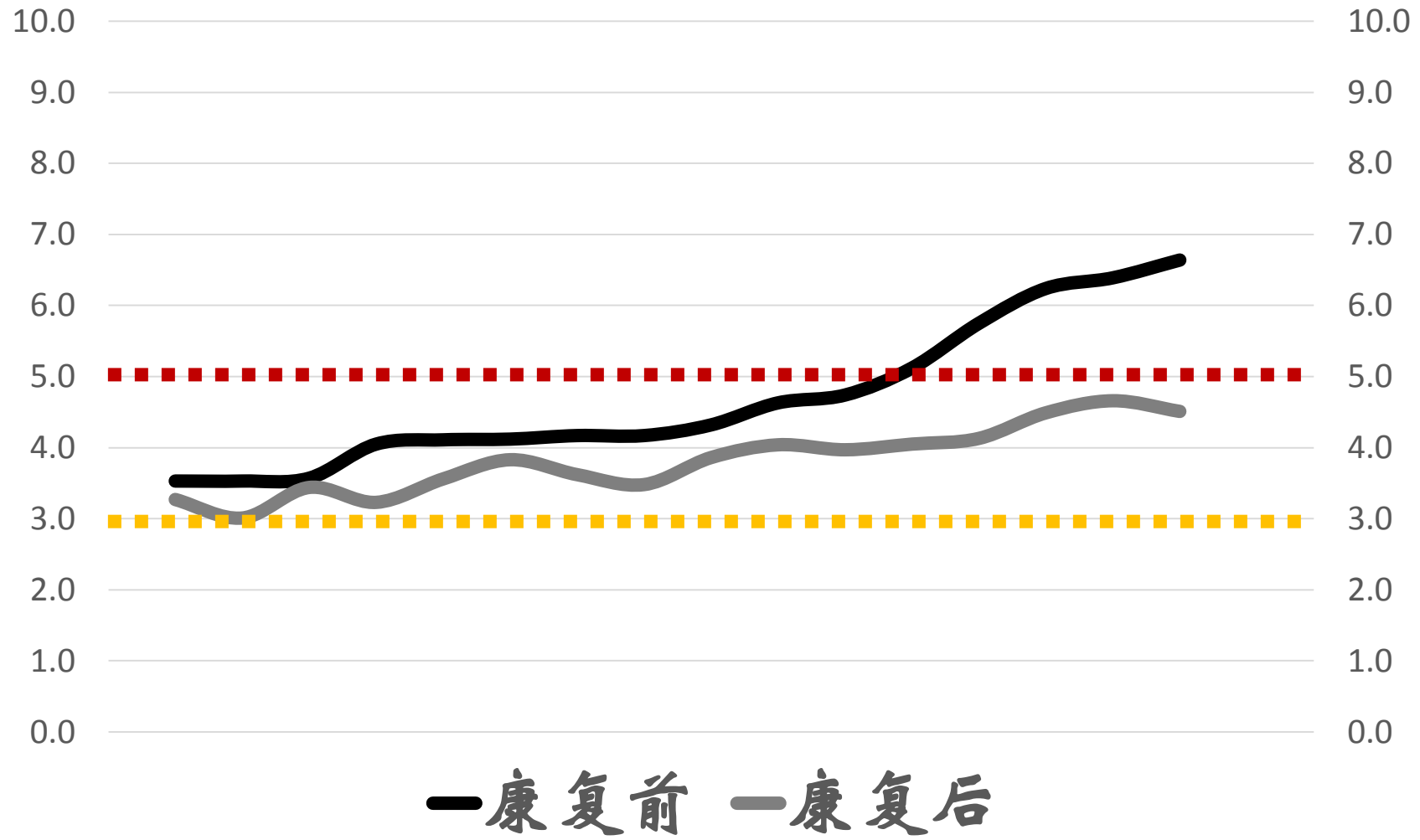


华山诊疗模式：产后腹直肌分离症





华山诊疗模式：产后腹直肌分离症



华山诊疗模式：产后腹直肌分离症

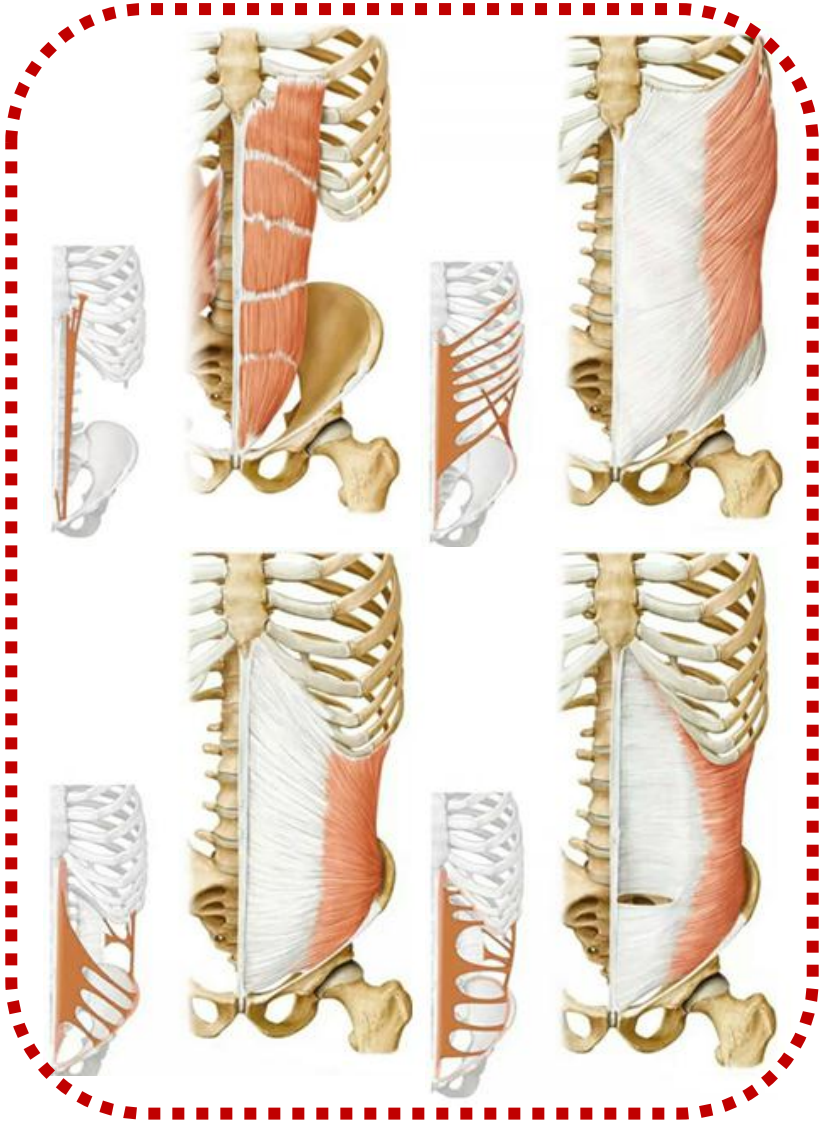
（PRe - ELAP）

Post-Rehabilation

+ Endoscopic Linea Alba Plication

华山 MDT 诊疗模式：（PRe）

诊



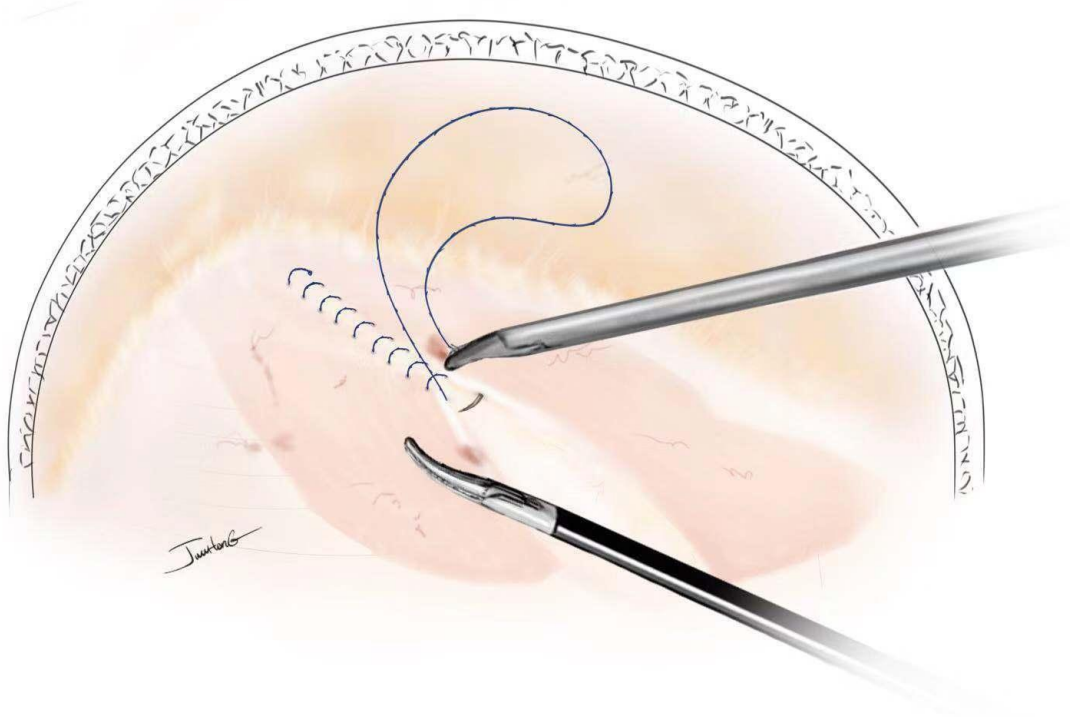
华山 MDT 诊疗模式：（ELAP）

治

- 康复团队
- 外科团队
- 辅助团队

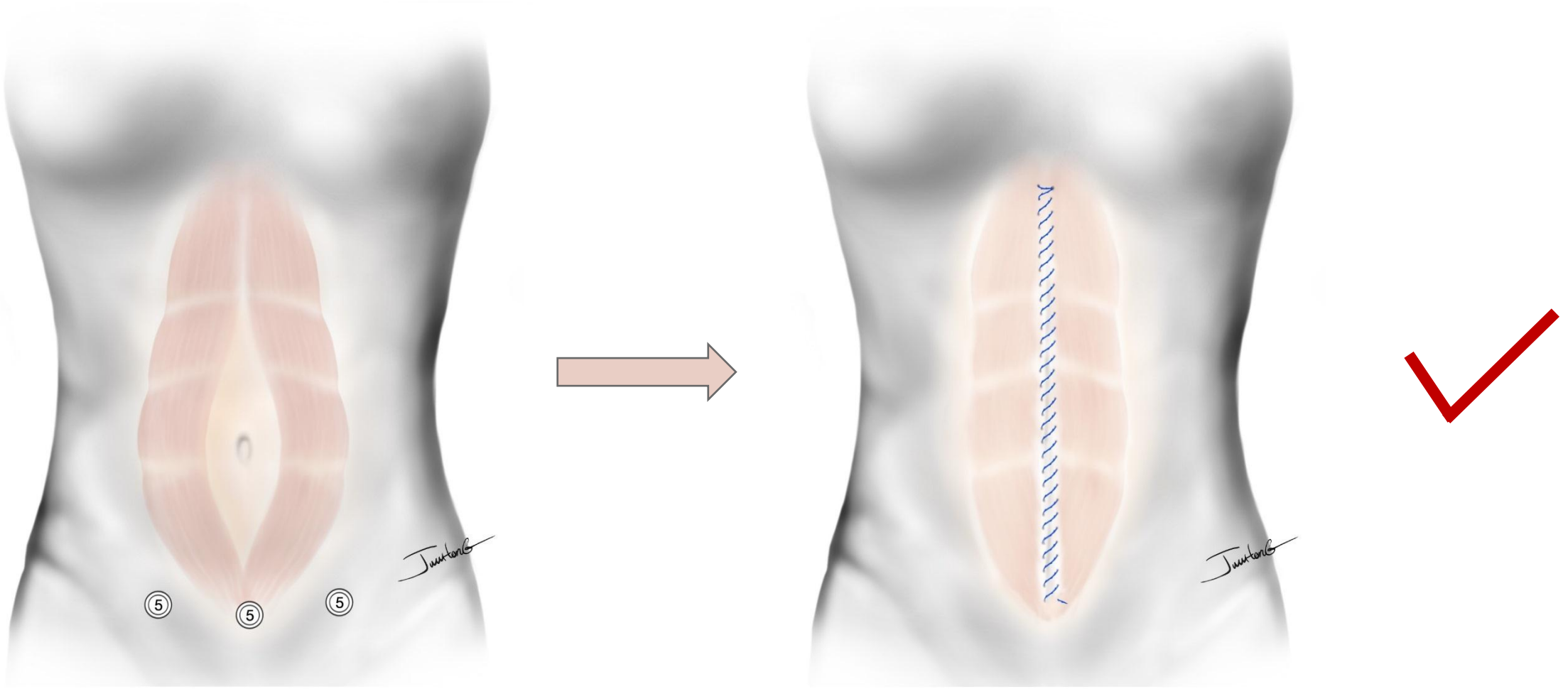
华山 MDT 诊疗模式：（ELAP）

治

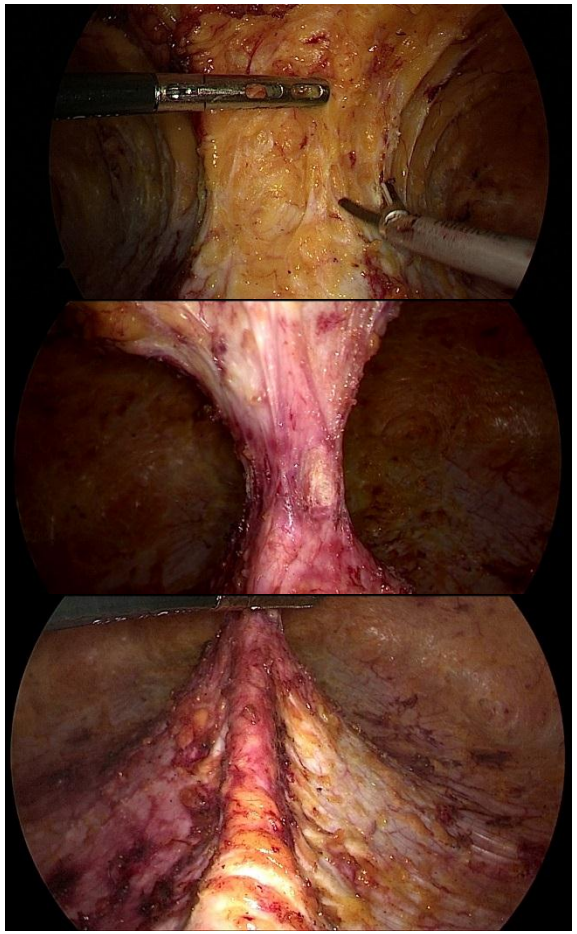


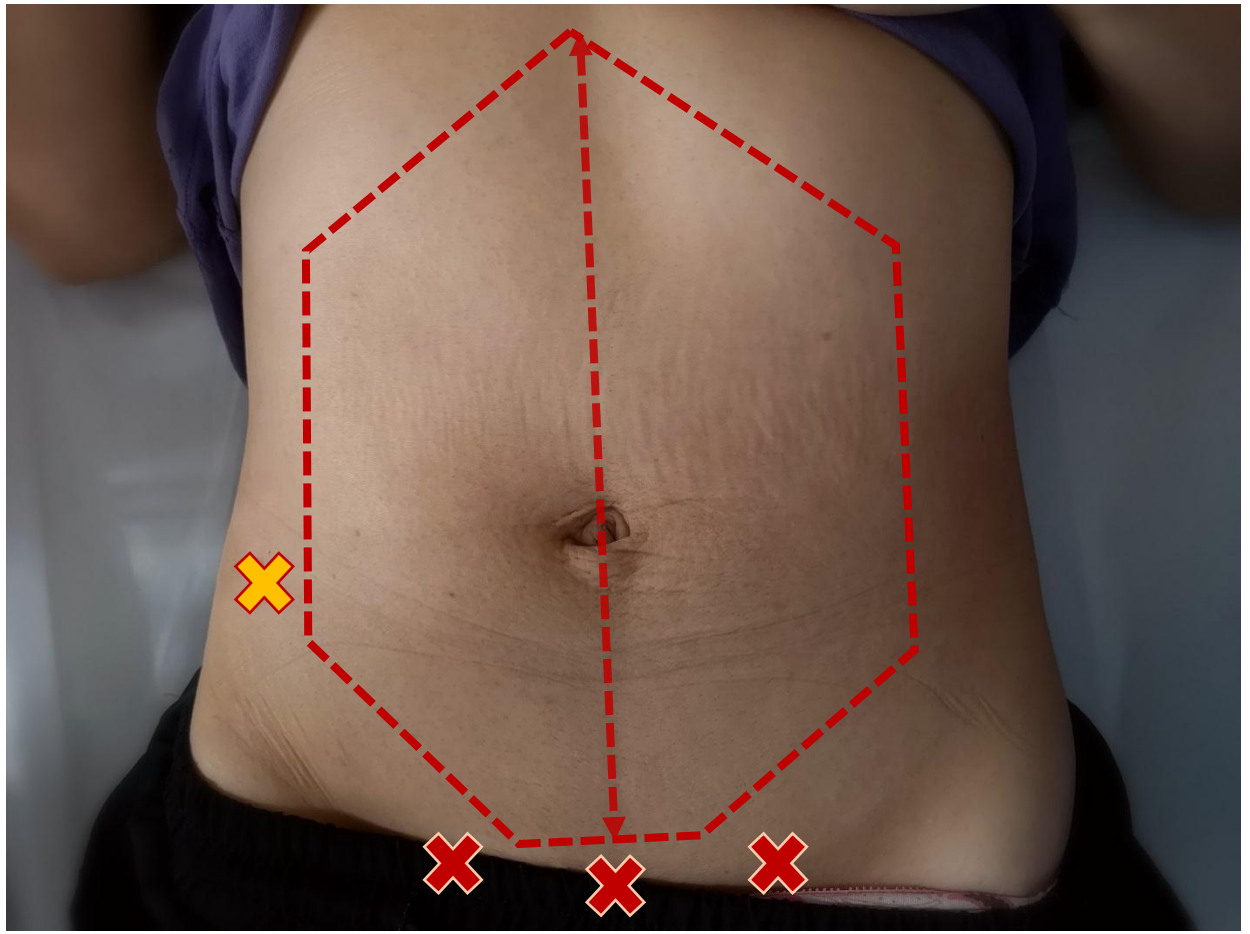
无须补片修补！

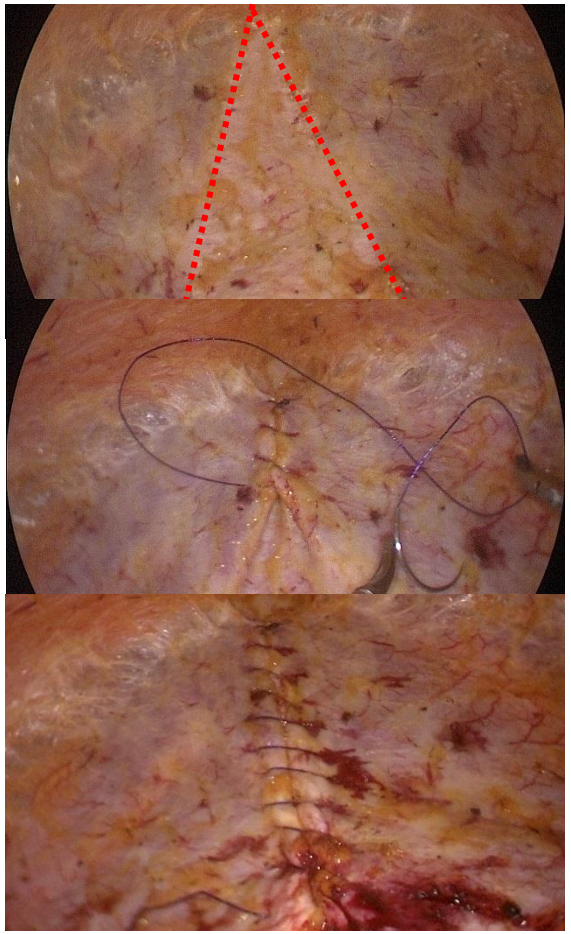
华山 MDT 诊疗模式：（ELAP）



华山 MDT 诊疗模式：（ELAP）







华山 MDT 诊疗模式：（术后恢复）

华山 MDT 诊疗模式：（术后恢复）

华山 MDT 诊疗模式：（PRe-ELAP）

朱俞岚/何凯医师：

您们申请注册的试验“术前腹肌锻炼对腹壁外科女性患者腹肌功能改善的探索性研究”已完成注册，注册号ChiCTR1900023012。

请注意：

1. 请明确纳入标准和排除标准的关系，排除标准是在满足纳入标准的研究对象中进行排除，例如，纳入标准如果限制为女性，那排除标准中就不需再注明排除男性，而且，标准设定中最好不要使用否定式的描述，该研究在标准设定中存在类似问题，我们进行了部分修改，请进一步检查；

2. 研究计划书中未说明隐蔽分组(allocation concealment)的方法，请参阅“吴泰相、刘关键：隐蔽分组（分配隐藏）和盲法的概念、实施与报告．中国循证医学杂志 2007;7(3):222-225”和“隐蔽分组、盲法的概念和实施方法（中国临床试验注册中心网站首页 http://www.chictr.org.cn/uploads/documents/20150802221507.pdf）”并做相应修改完善，以保证充分的隐蔽分组；

3. 原始数据和统计结果必须可以共享，没有共享计划或不共享均是不正确的；

4. 试验的原始数据应上传至中国临床试验注册中心的ResMan原始数据共享平台(IPD共享平台)http://www.medresman.org。

http://www.chictr.org.cn/uploads/documents/201810/5c03681ce9d94e57ac3c9b6a76269502.pdf

第1讲：产后腹直肌分离症的概述

第2讲：产后腹直肌分离症的危害

第3讲：腹壁核心肌群有哪些功能？

第4讲：如何科学地评估腹壁功能？

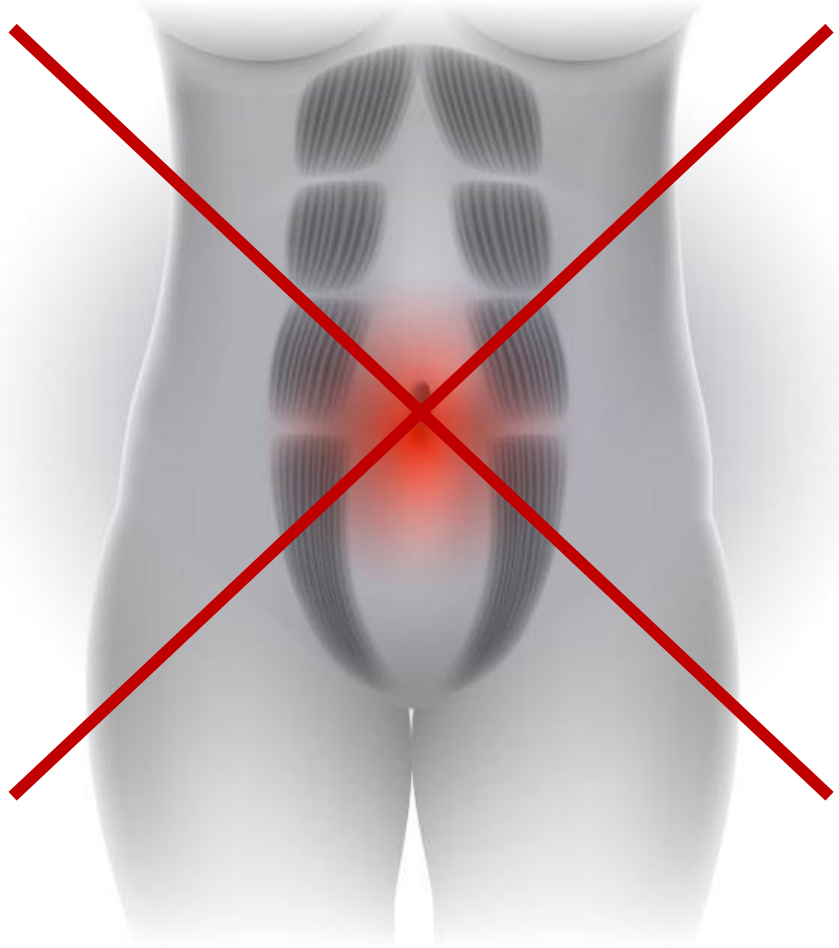
第5讲：DRAM的康复治疗（1）

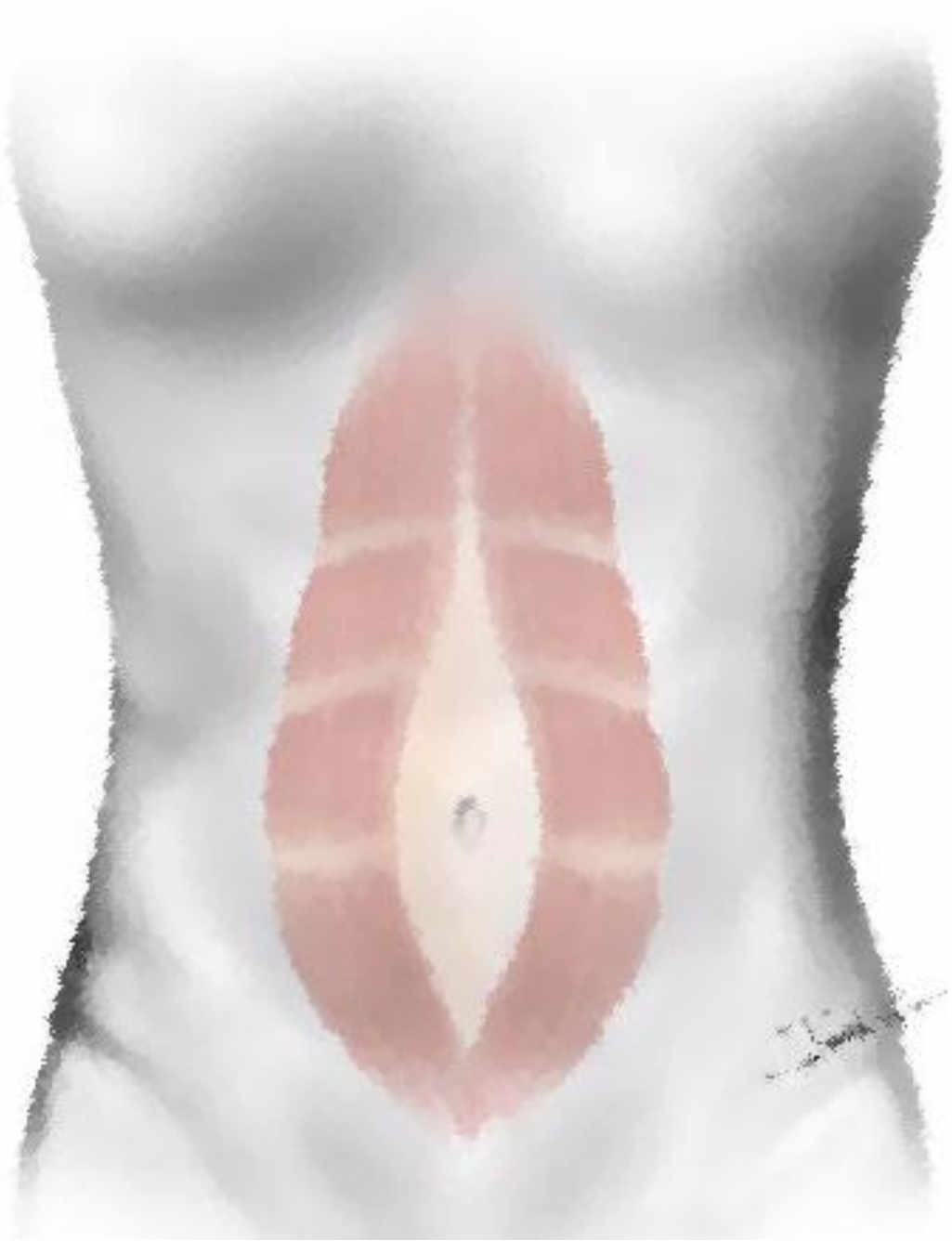
第6讲：DRAM的康复治疗（2）

第7讲：DRAM的手术治疗

第8讲：华山医院诊治经验分享

关注女性产后健康，远离腹直肌分离症





谢 谢 ！