

SAĞ KOLON TÜMÖRLERİNDE KOMPLET MEZOKOLİK EKSİZYON (CME)

Dr Mehmet Güray DUMAN

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Cerrahi Anatomi

Rektum anatomisi (TME)

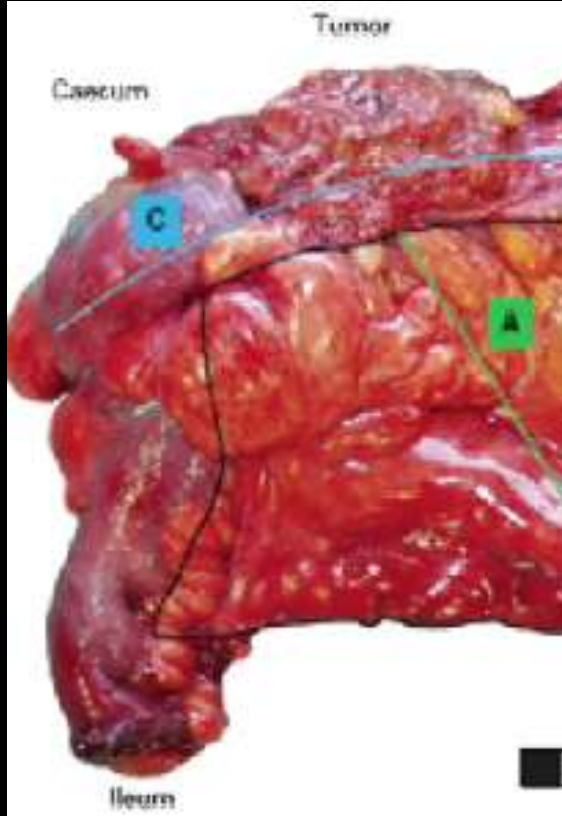
- Mezorektum
- Pelvik fasyal sistem
- İnferior mezenterik damarlar
- Orta rektal damarlar
- Pelvik otonomik sinirler

Kolon anatomisi (CME)

- Asendan ve transvers mezokolon
- Retrokolik fasyal sistem
- İleokolik damarlar
- Sağ kolik damarlar
- Orta kolik damarlar
- Gastropankreatikokolik trunkus (Henle)
- Mezenterik otonomik sinirler

- TME sonrası

- 5 yıllık sürvi %45-50 → %75
- Lokal nüks %30 → %5-8



ezokolik
ensipleri

olik eksizyon
r ligasyon
nektomi (D3)

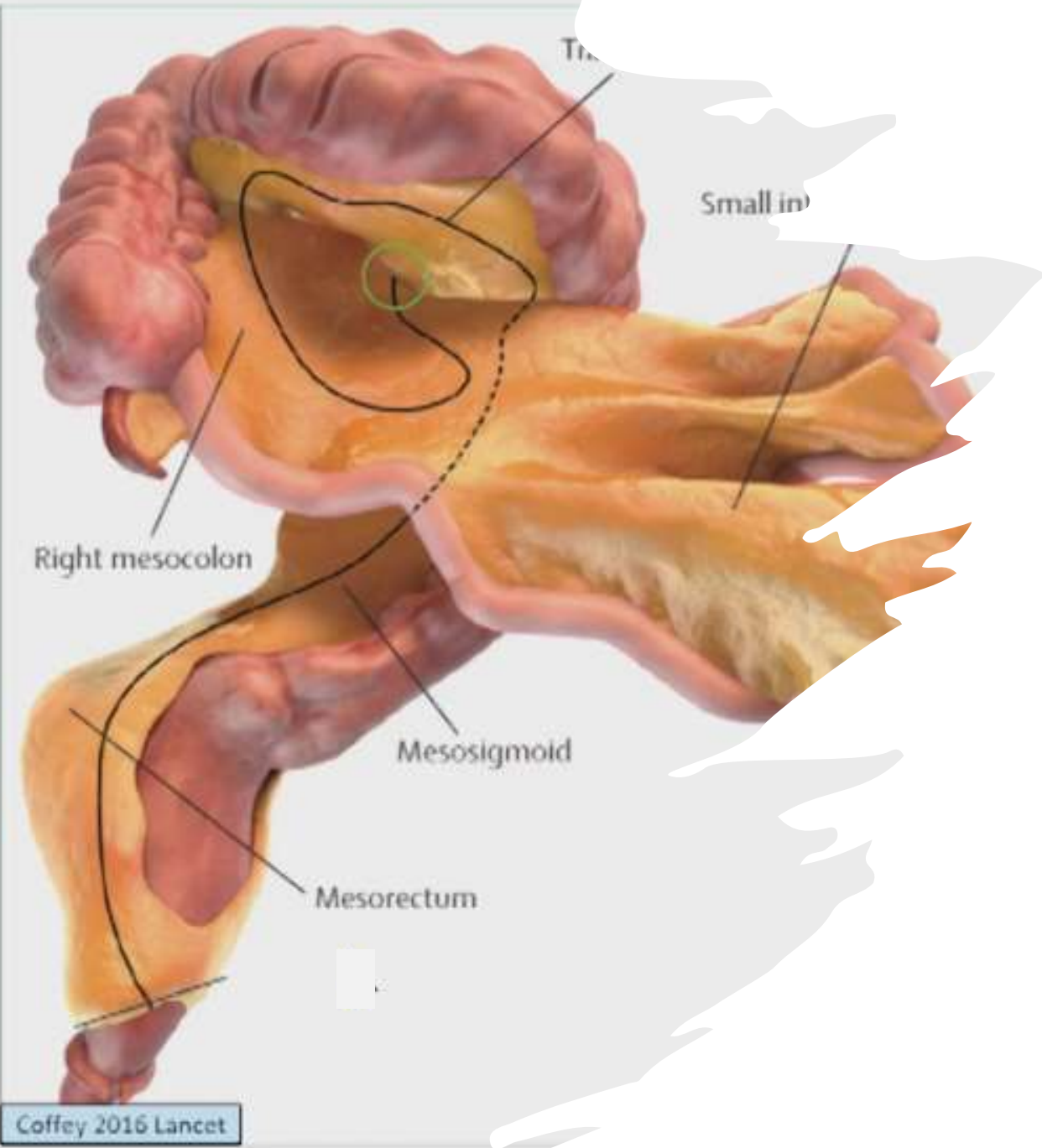
- Cerrahi yaklaşım:

- Açık cerrahi
- Laparoskopik cerrahi
- Robotik cerrahi

- Anatomik önkoşullar aynı

- Embryoloji
- Mezo
- Arterler
- Venler
- Lenf nodları

Embriyoloji



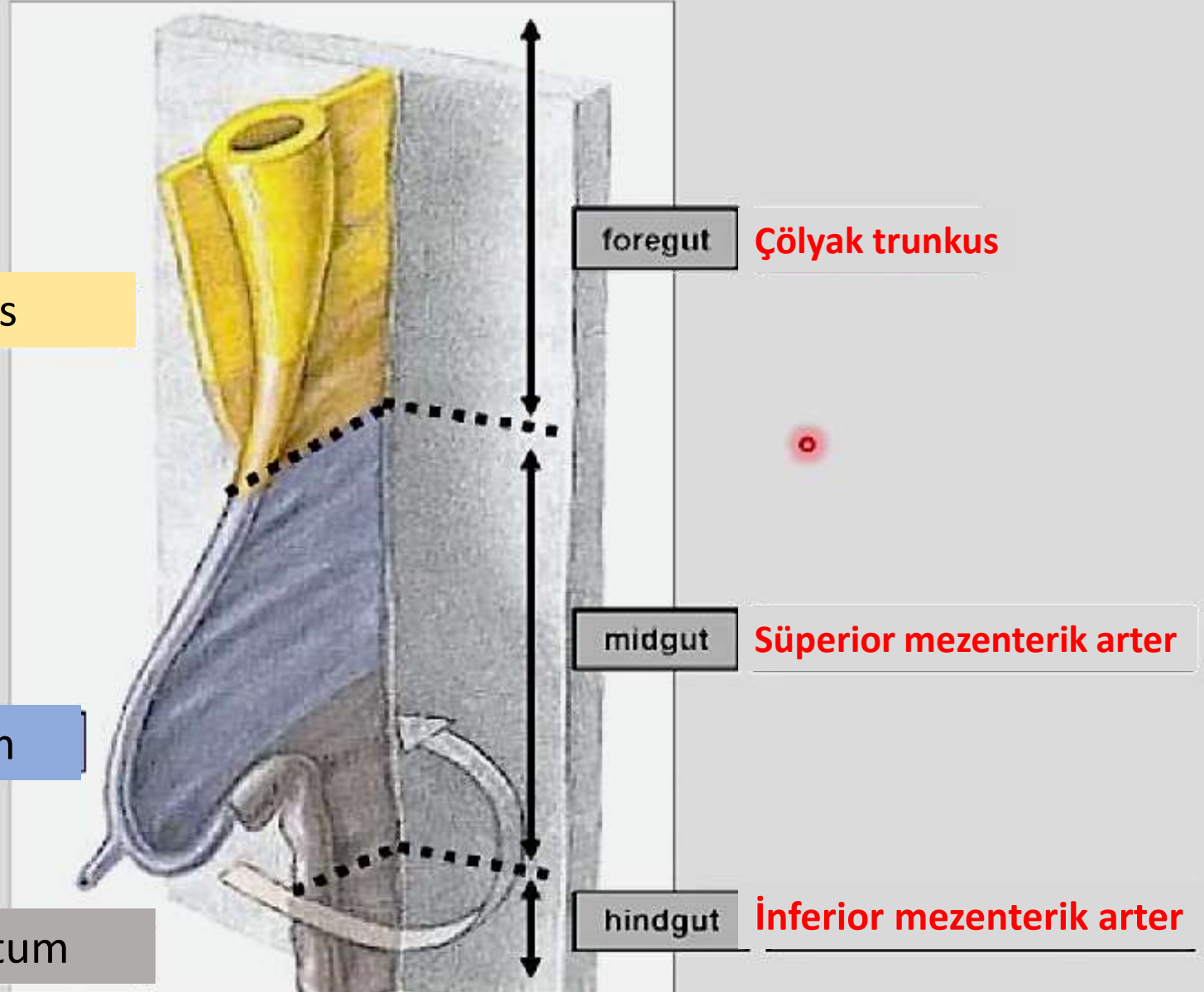
1. Mide, ince bağırsak, kolonda devamlılık gösterir
2. Mobil veya bir yere tutunmuş ama kaybolmuş (yokolmuş) değil
3. Cerrahi olarak ayrılabilir

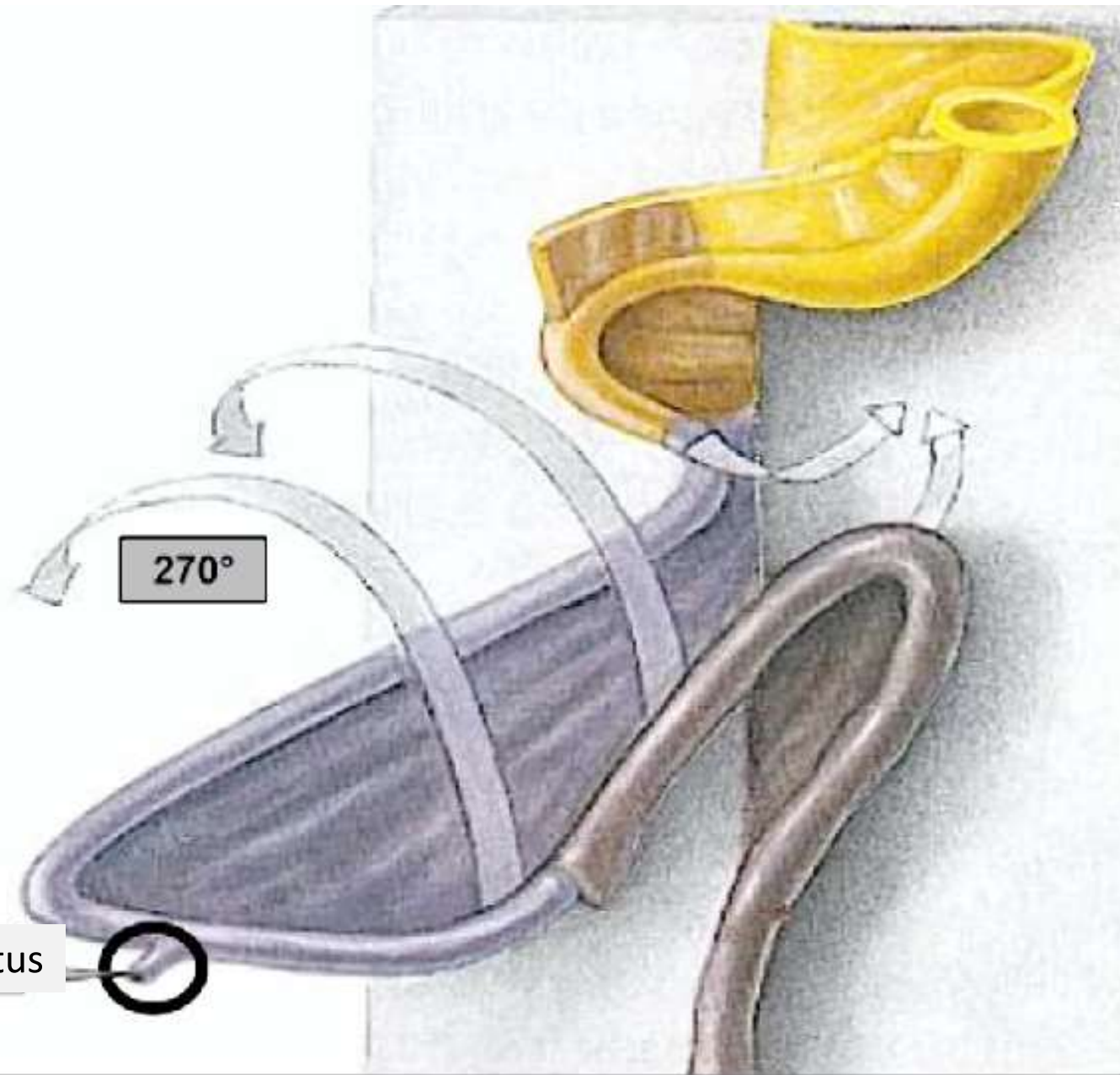
Primitif gastrointestinal tüp

Mide-duodenum-pankreas

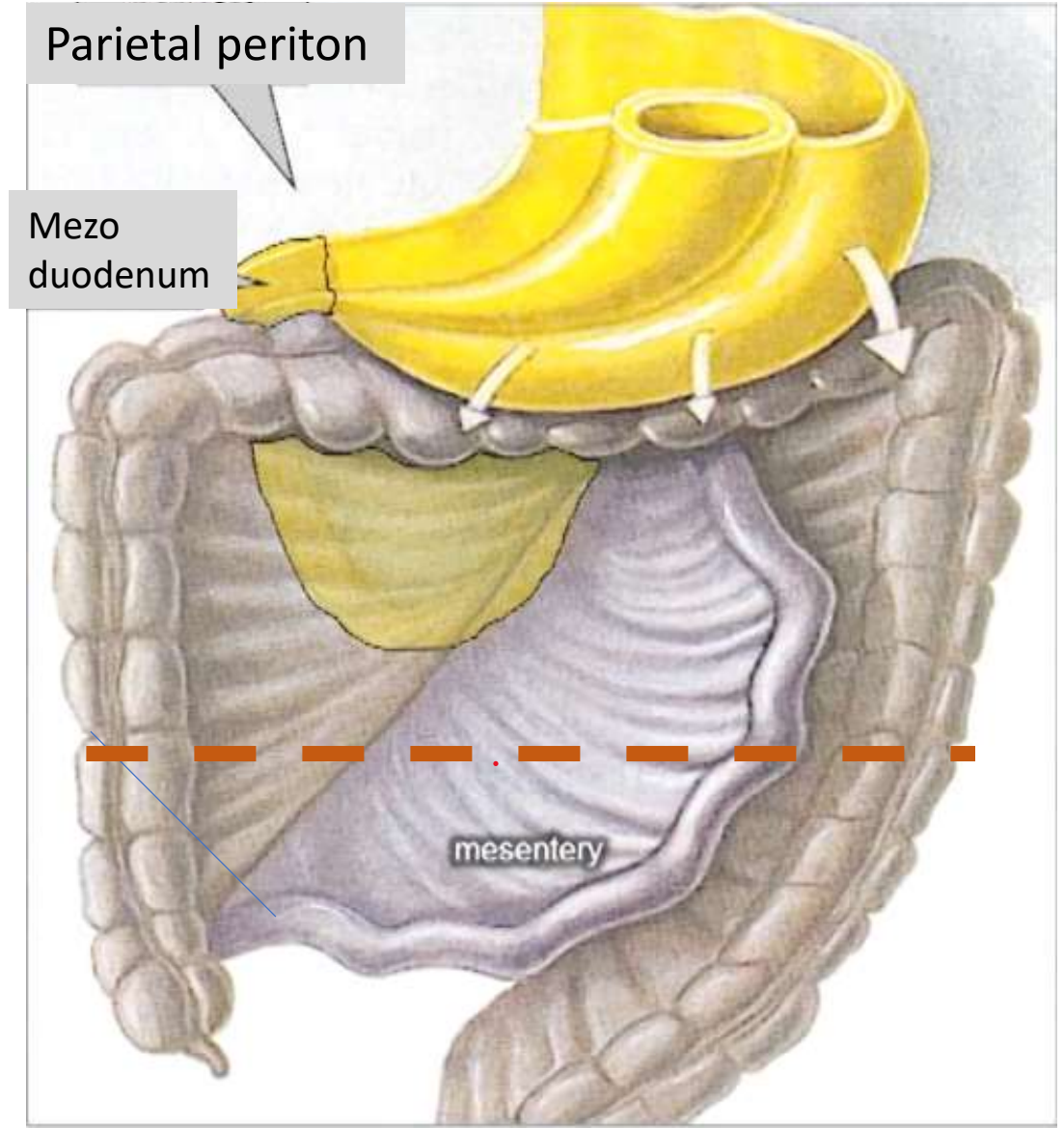
Jejunum-ileum

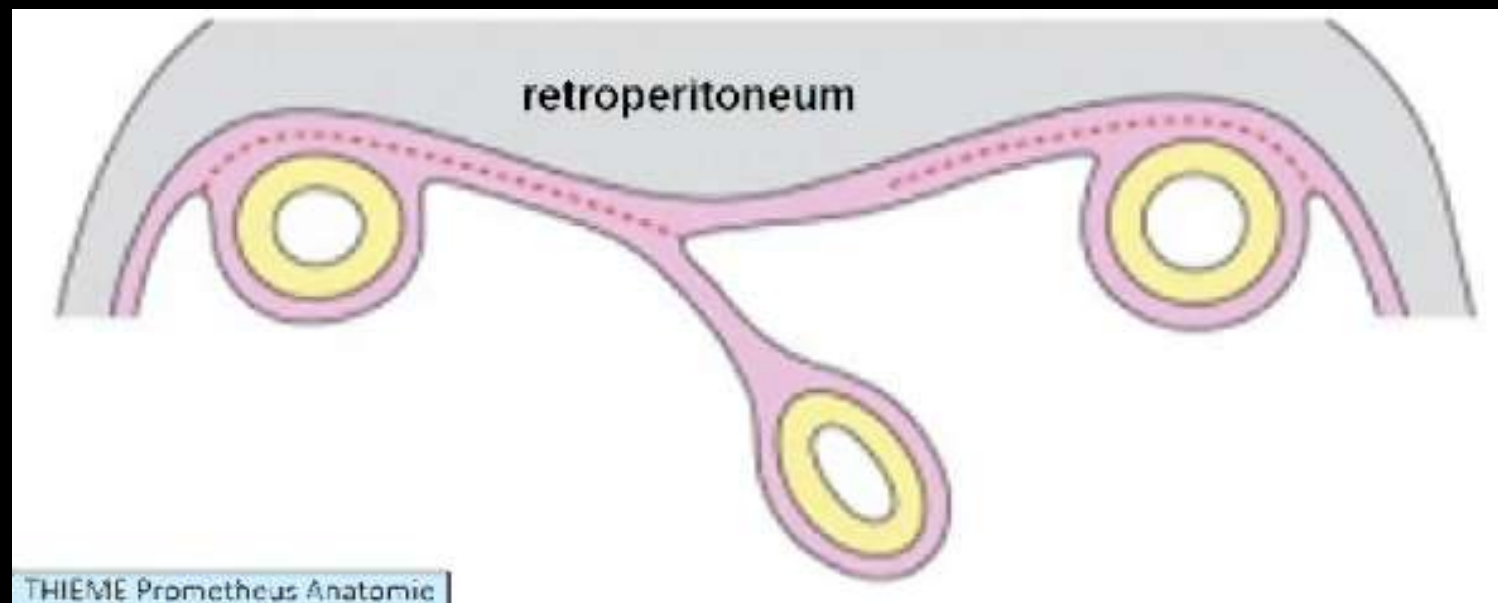
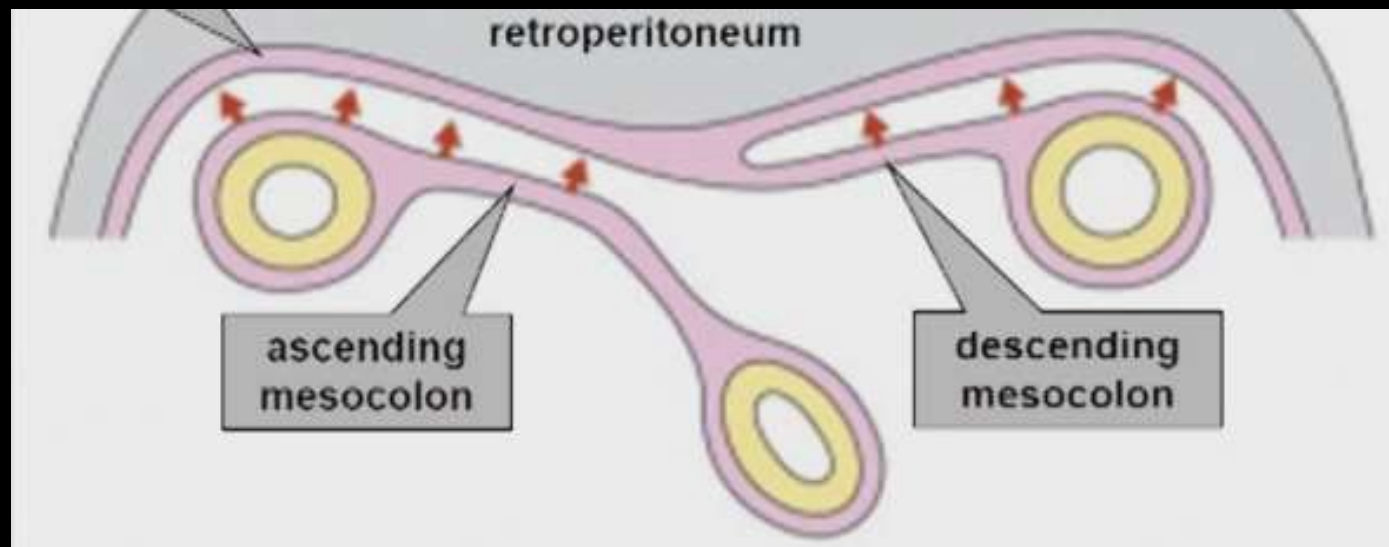
Kolon-rektum



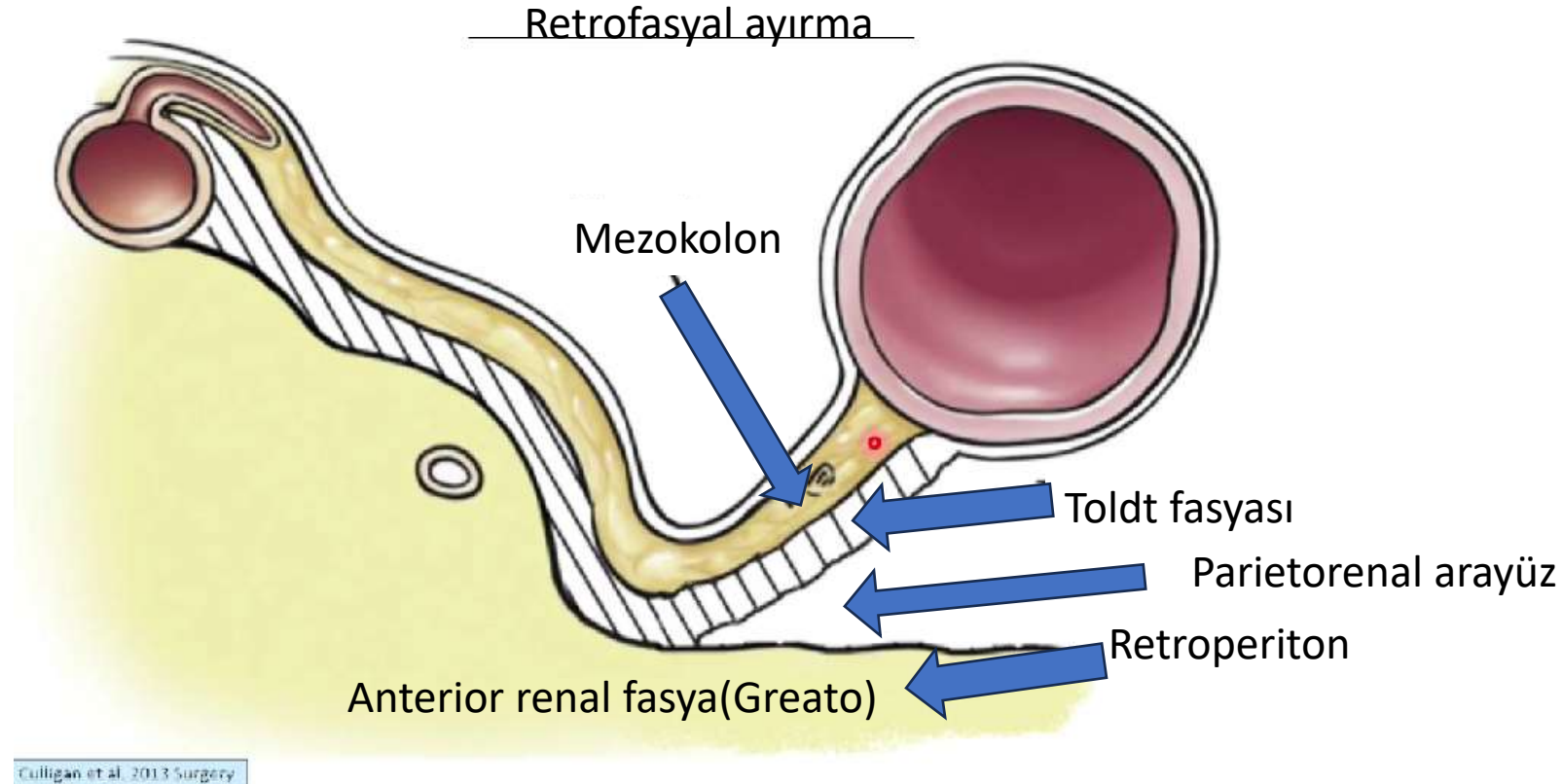


Omfalomezenterik duktus

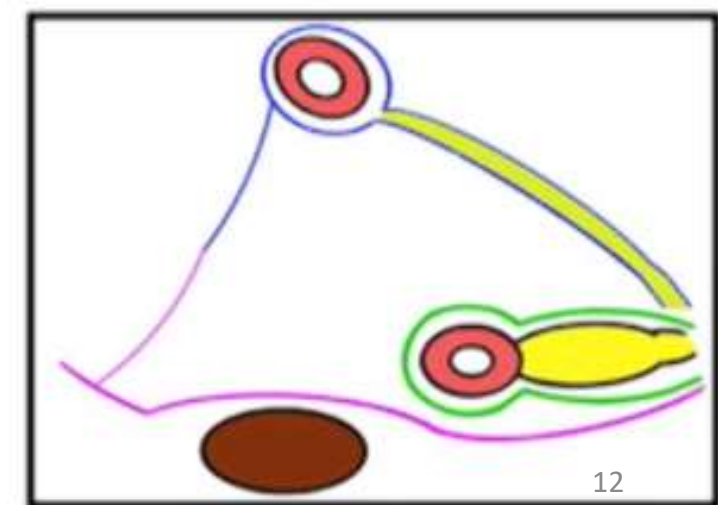
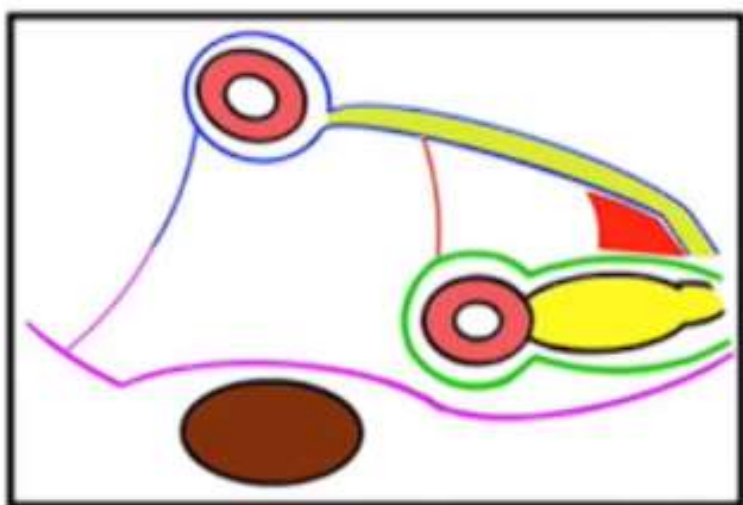
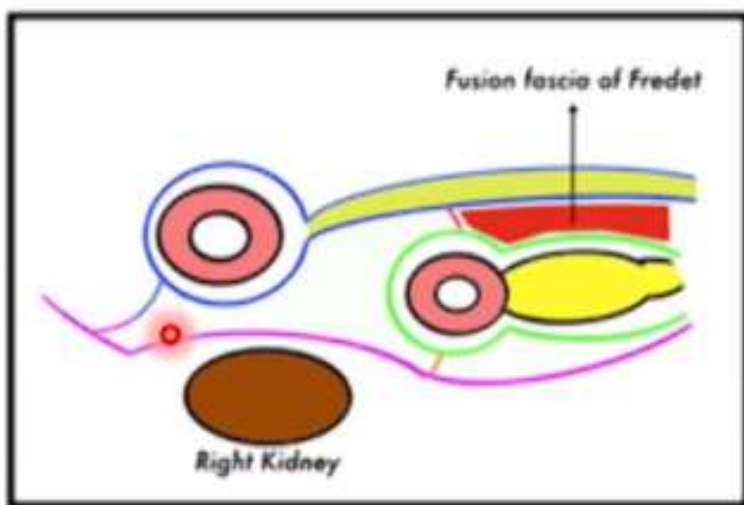
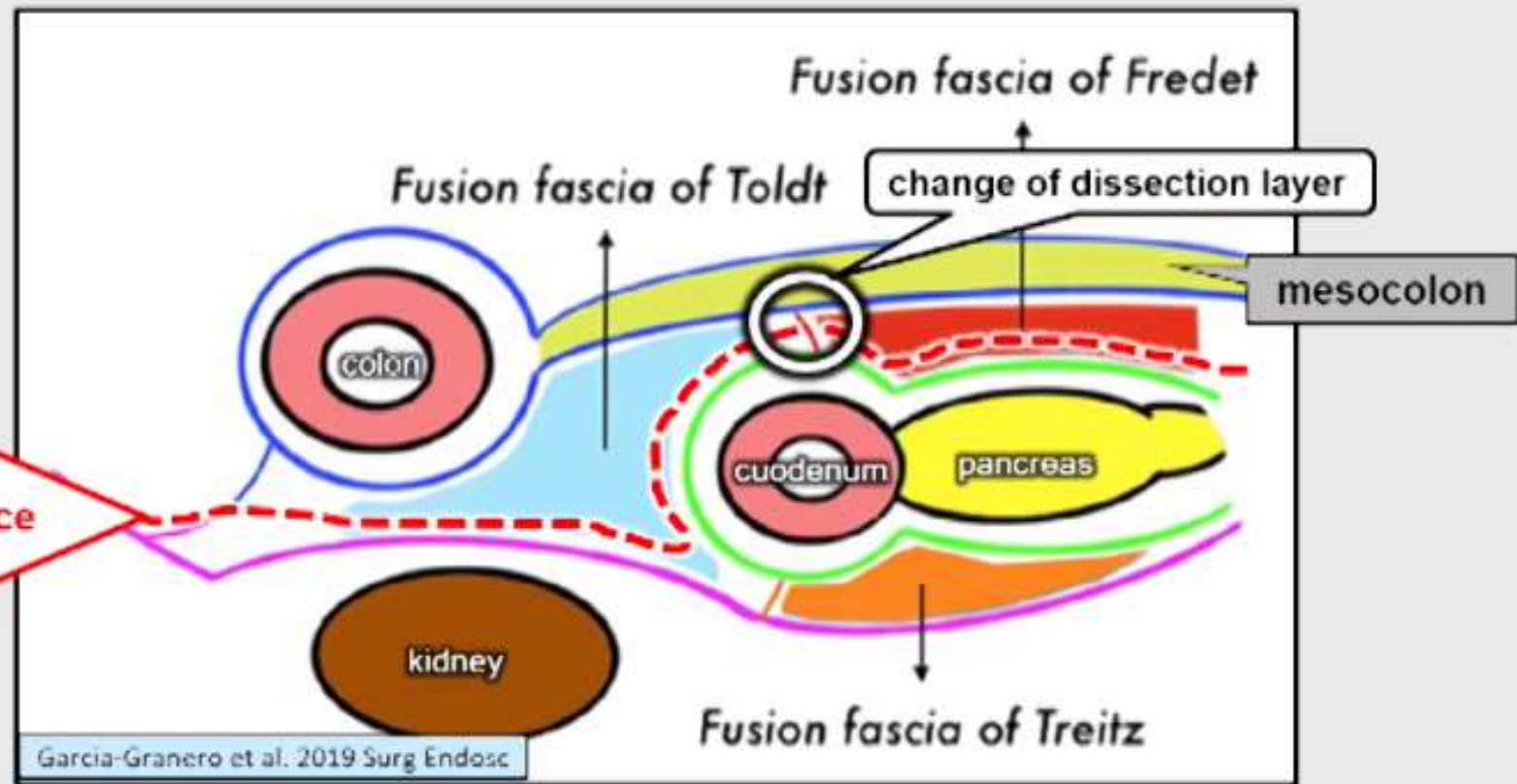




Mezokolik eksizyon-mezoların ayrılması

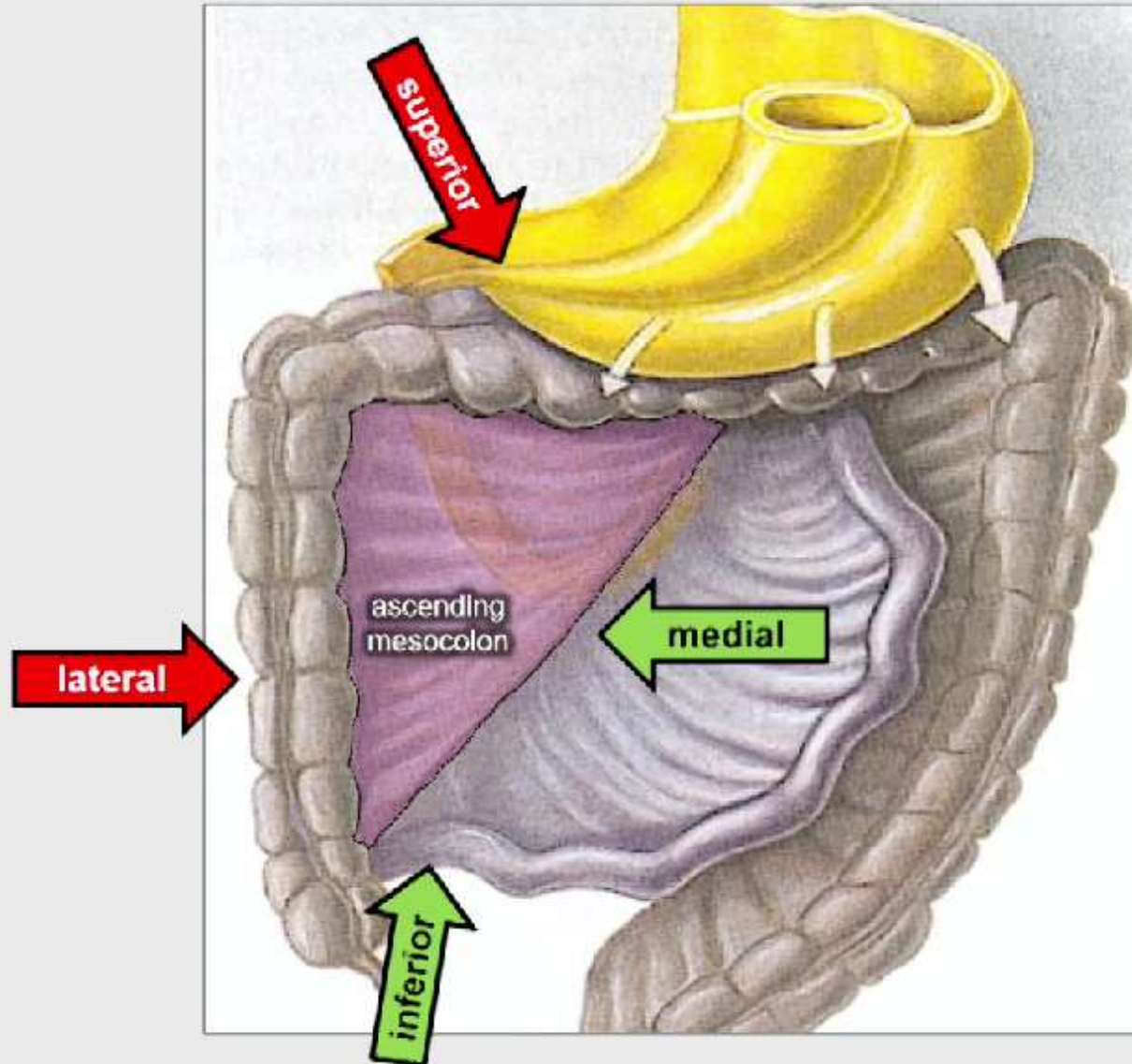


parieto-renal interface



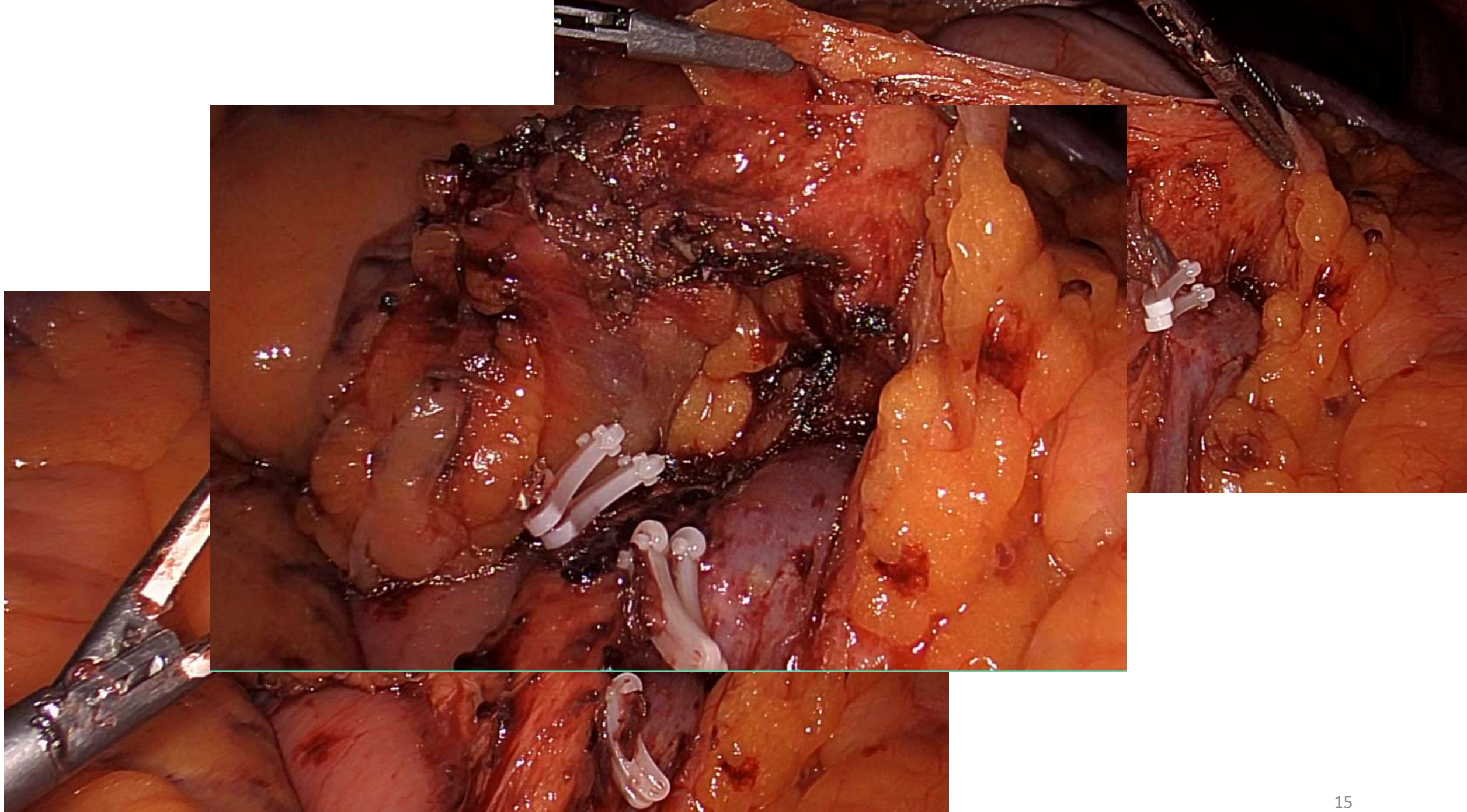
Mezokolik Eksizyon

Cerrahi yaklaşımlar



«Damarları sevin»

- Düşmanlarınız dostlarınız olmalı
- Normal anatomiye aşina olun
- Anormal anatominin hem ameliyat öncesi, hem de ameliyat sırasında farkında olun
- Santral vasküler ligasyon gerçekten santral olmalı

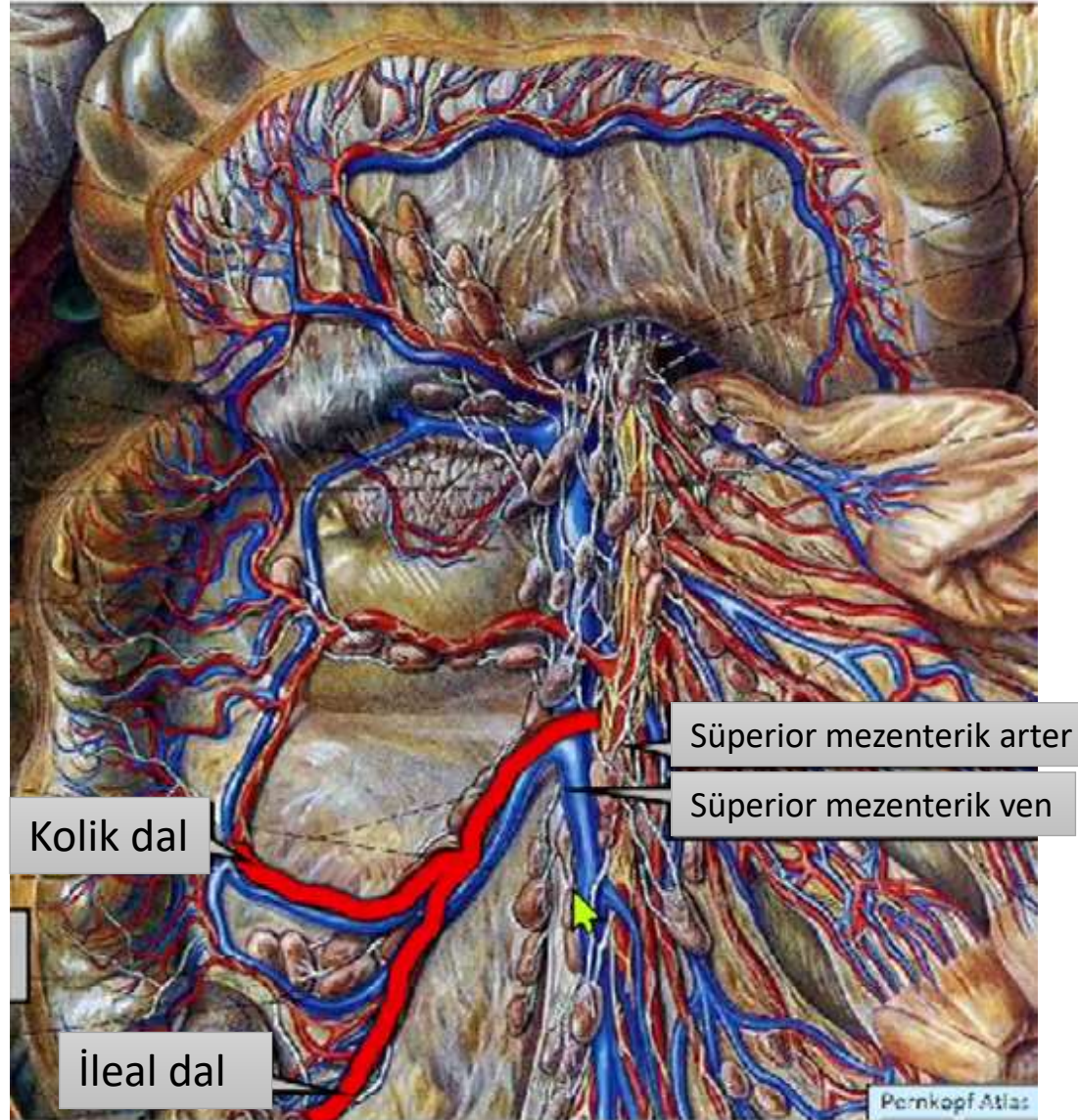


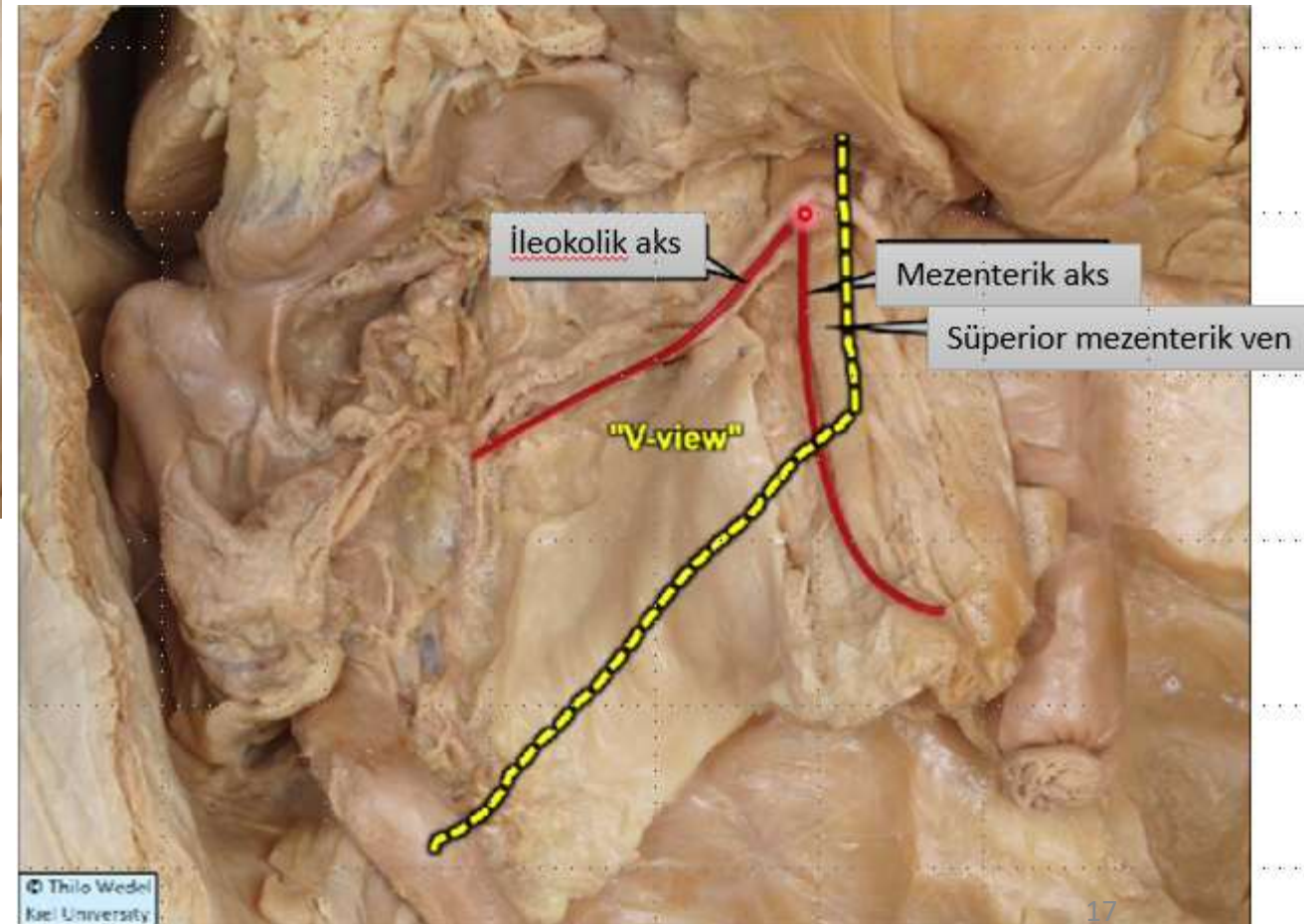
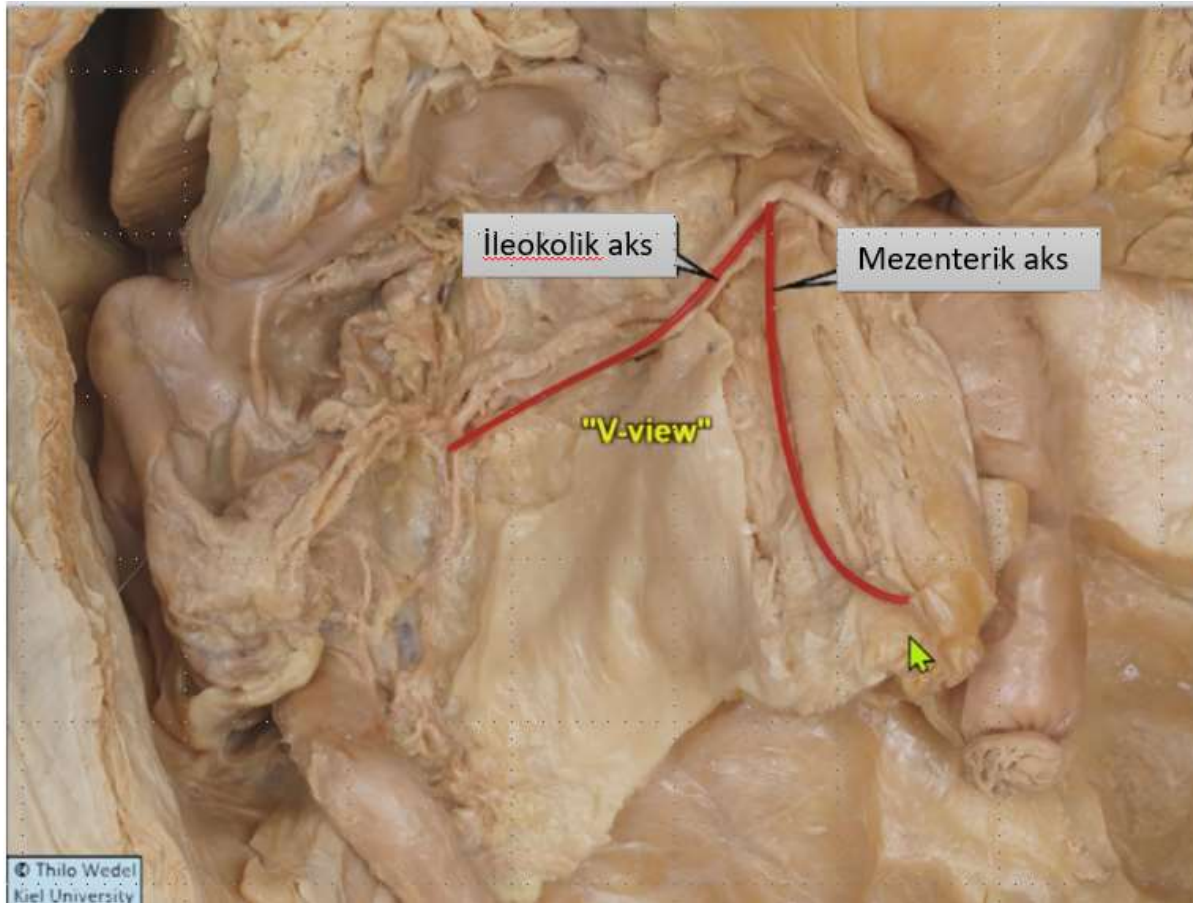
Arterler

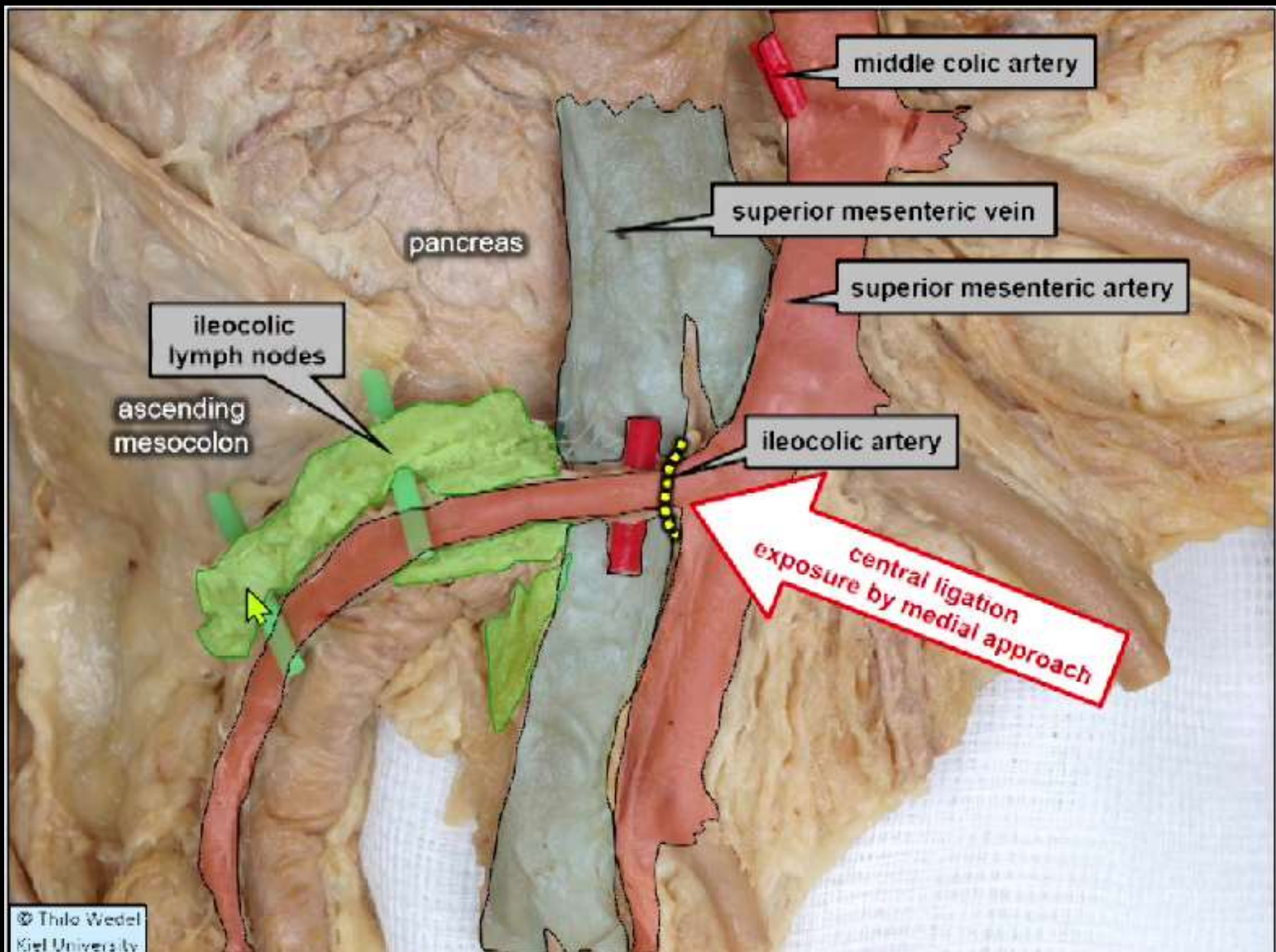
İleokolik arter

%53 SMV önünde
%47 SMV arkasında

%100 mevcuttur
Diseksiyon başlangıcı

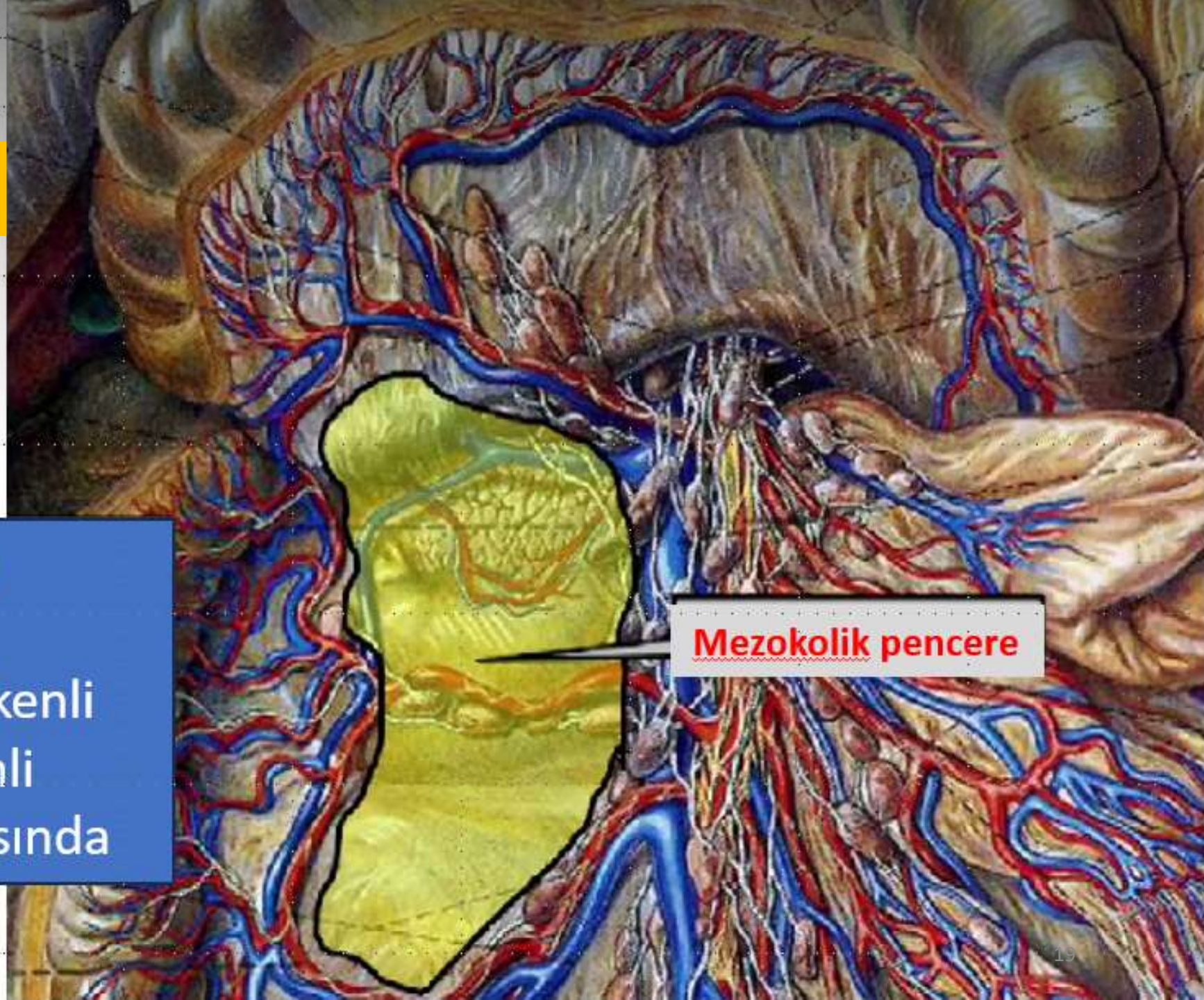






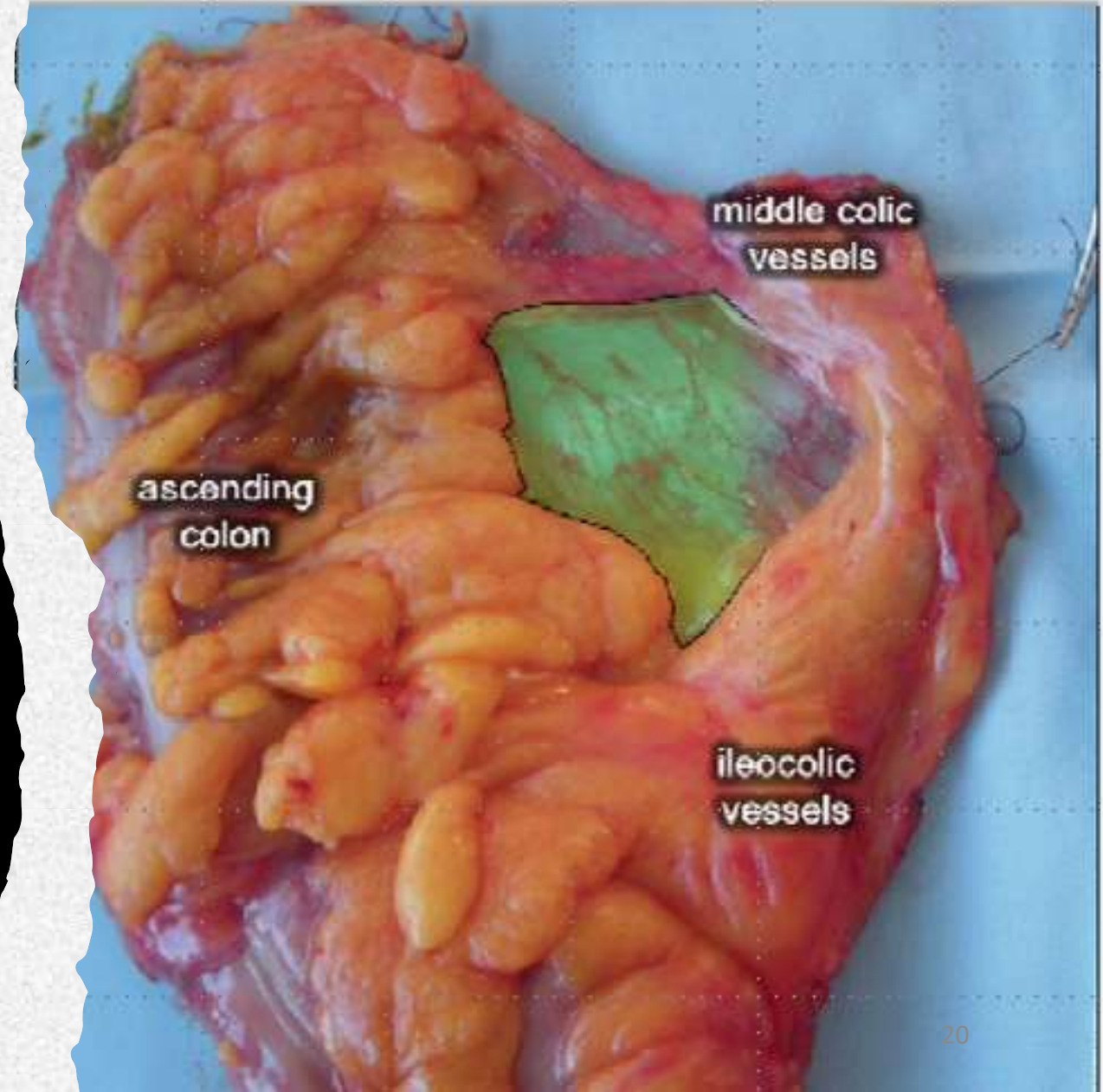
Sağ Kolik Arter

%40 insanda bulunmaz
%42 SMA kökenli
%10 Orta kolik arter kökenli
%8 ileokolik arter kökenli
SMV önünde veya arkasında



Mezokolik pencere

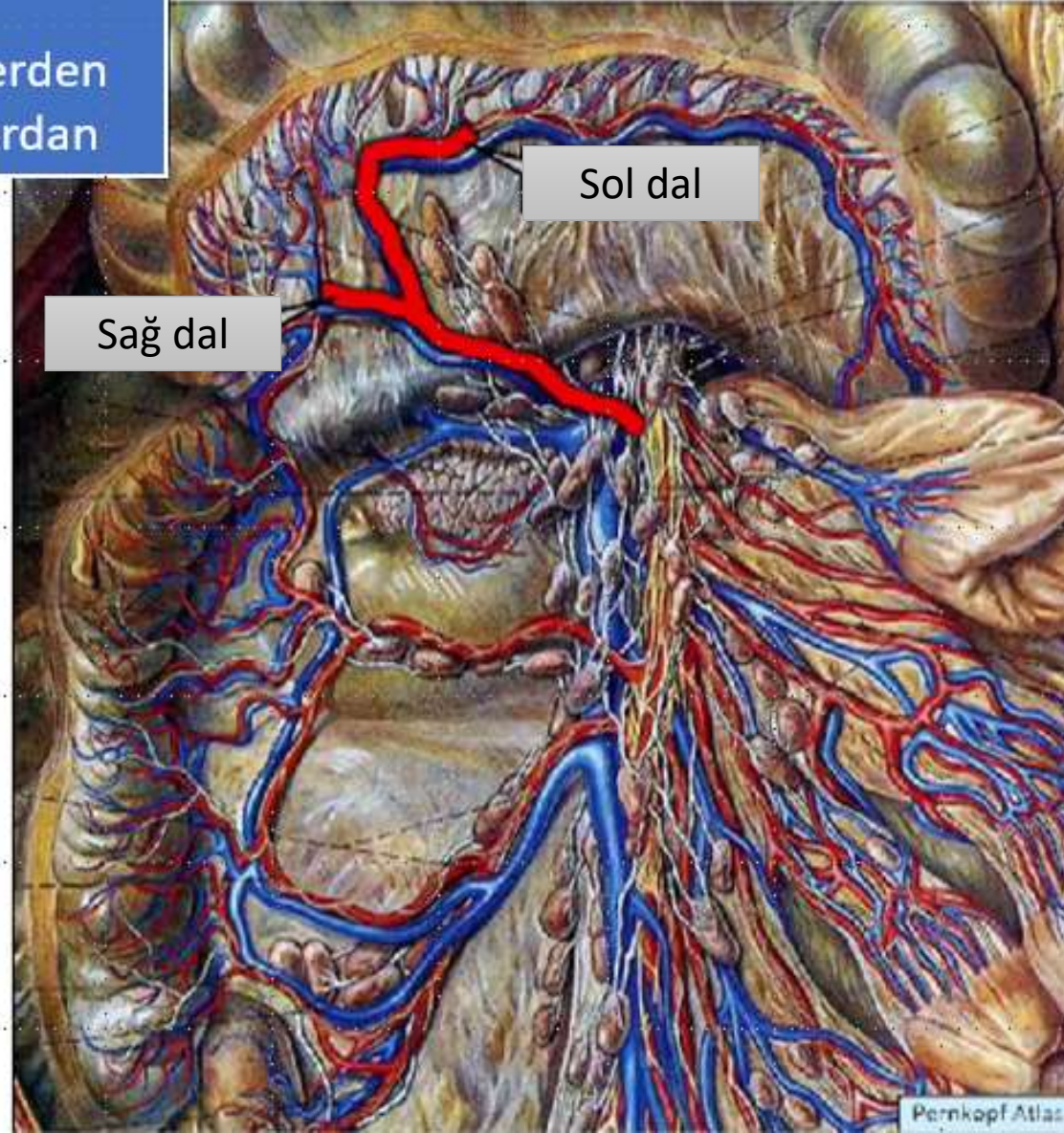
Sağ kolik arter

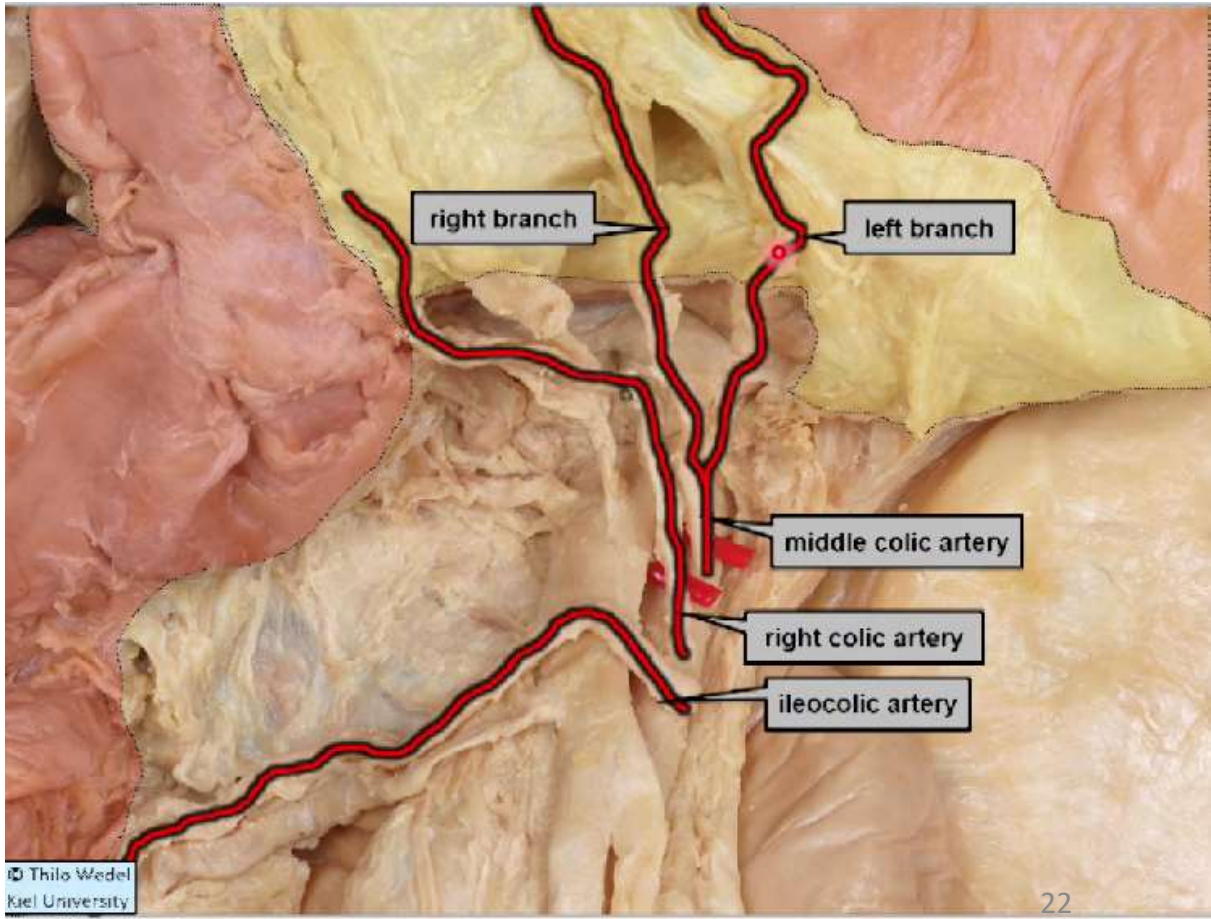
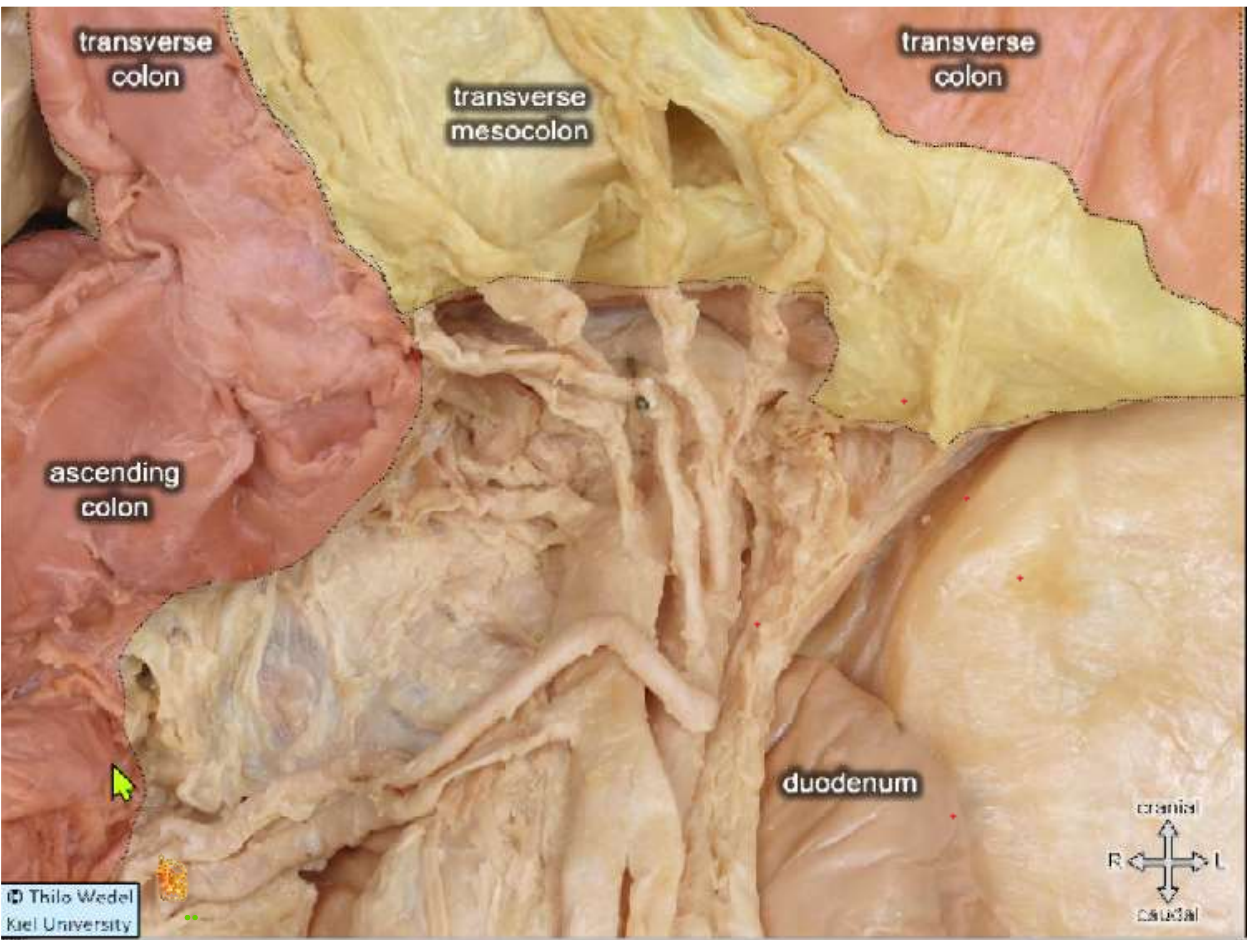


Arterler

Orta kolik arter

%5- yok
%75 SMA kökenli
%17 Sağ kolik arterden
%3 Diğer damarlardan

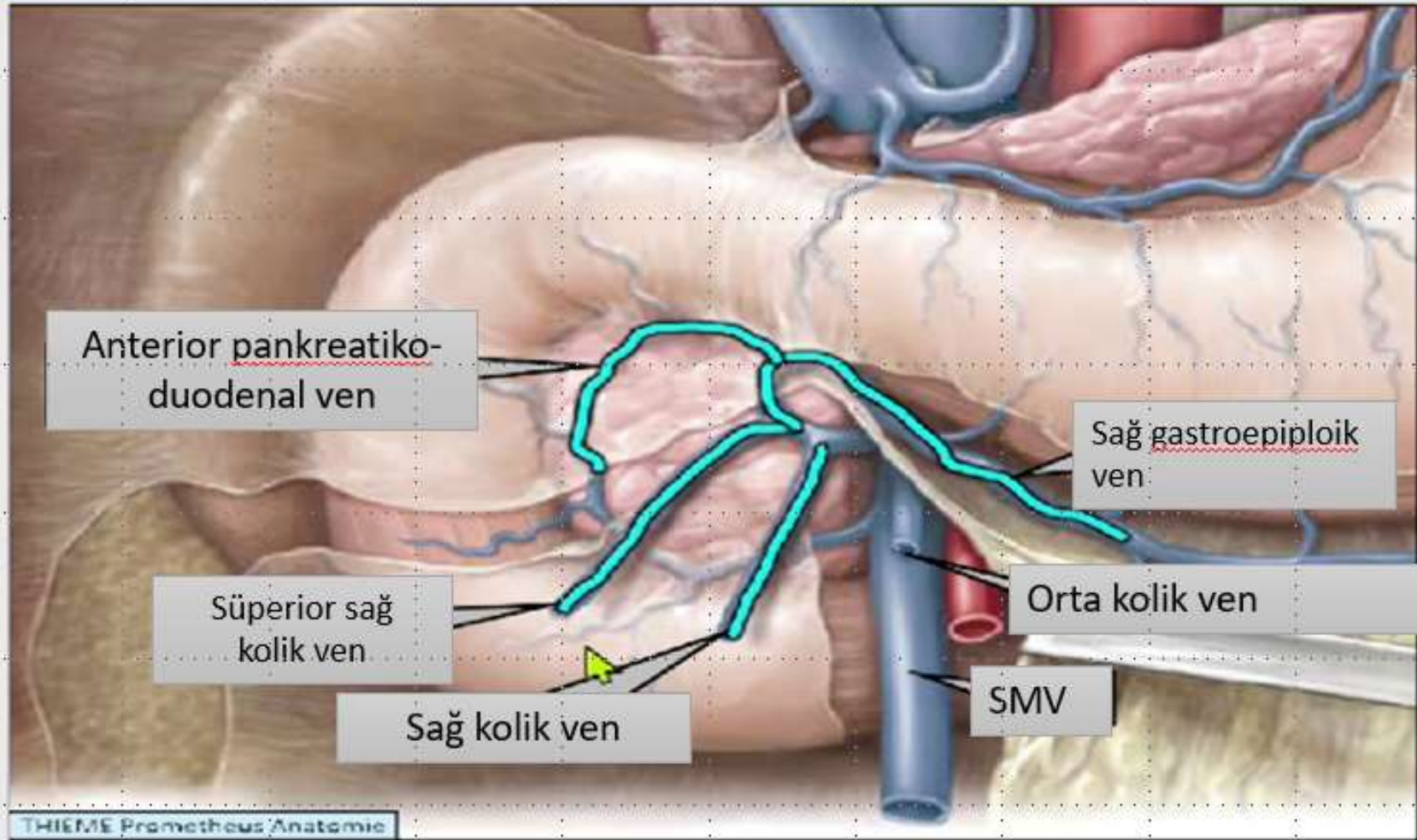


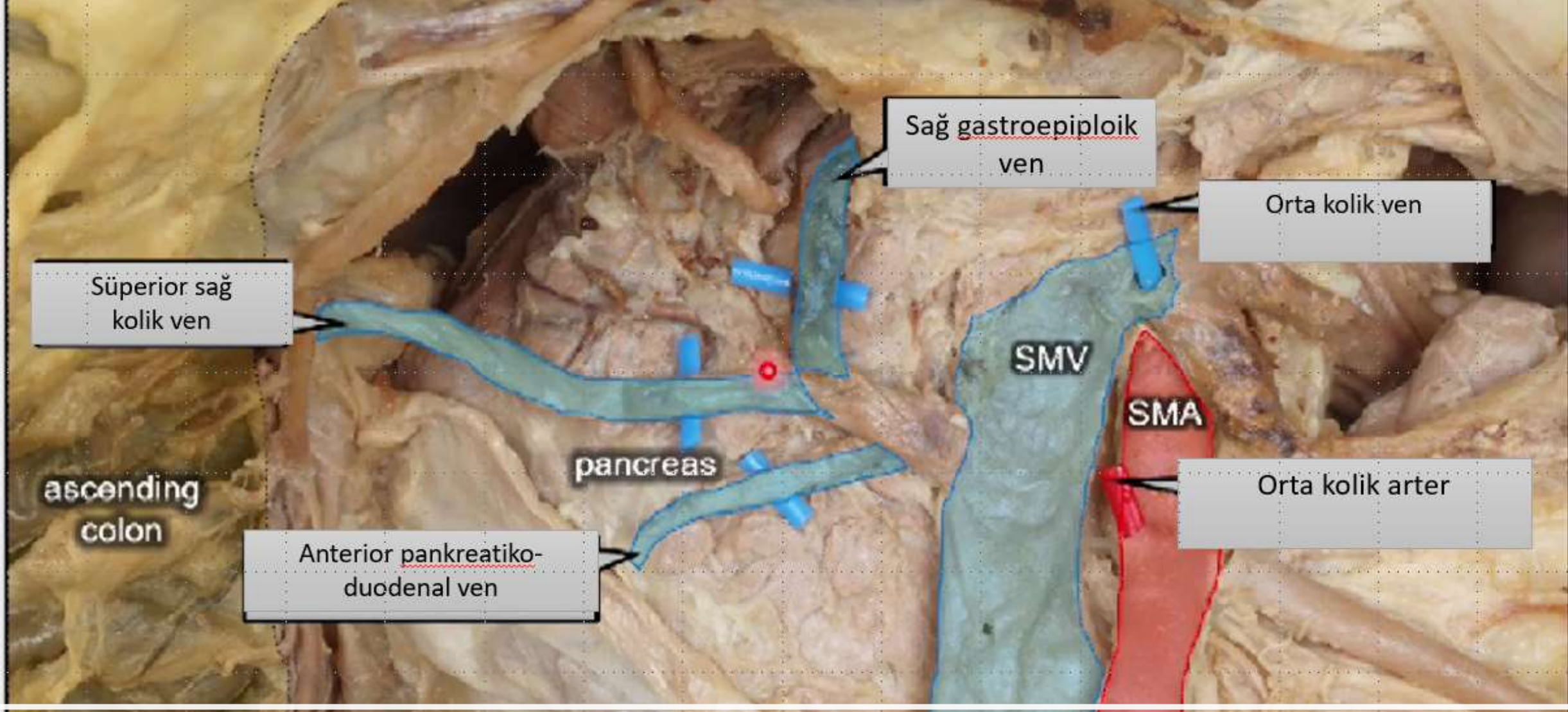


Venler

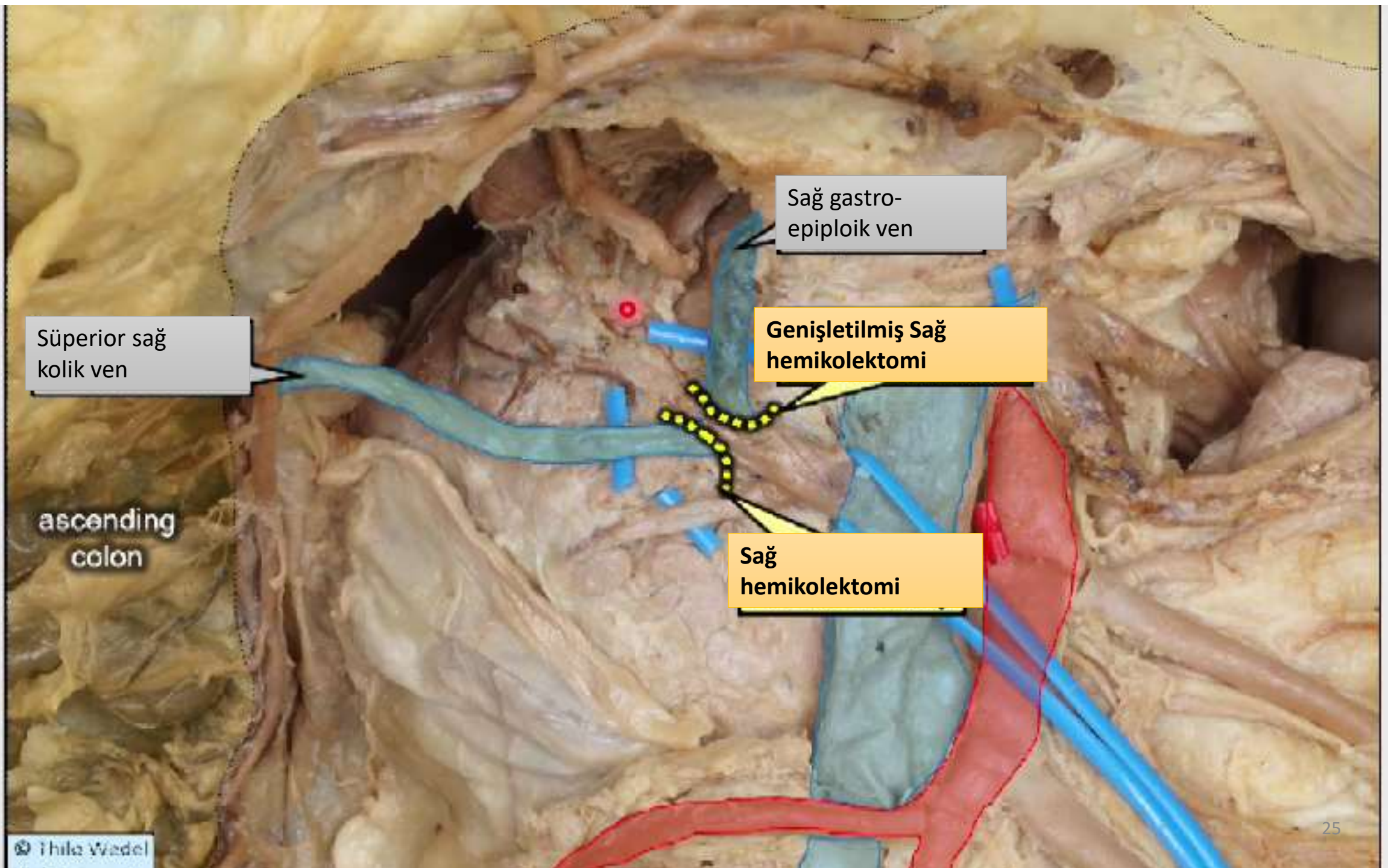
Mide + pankreas + kolon = Ortak venöz drenaj

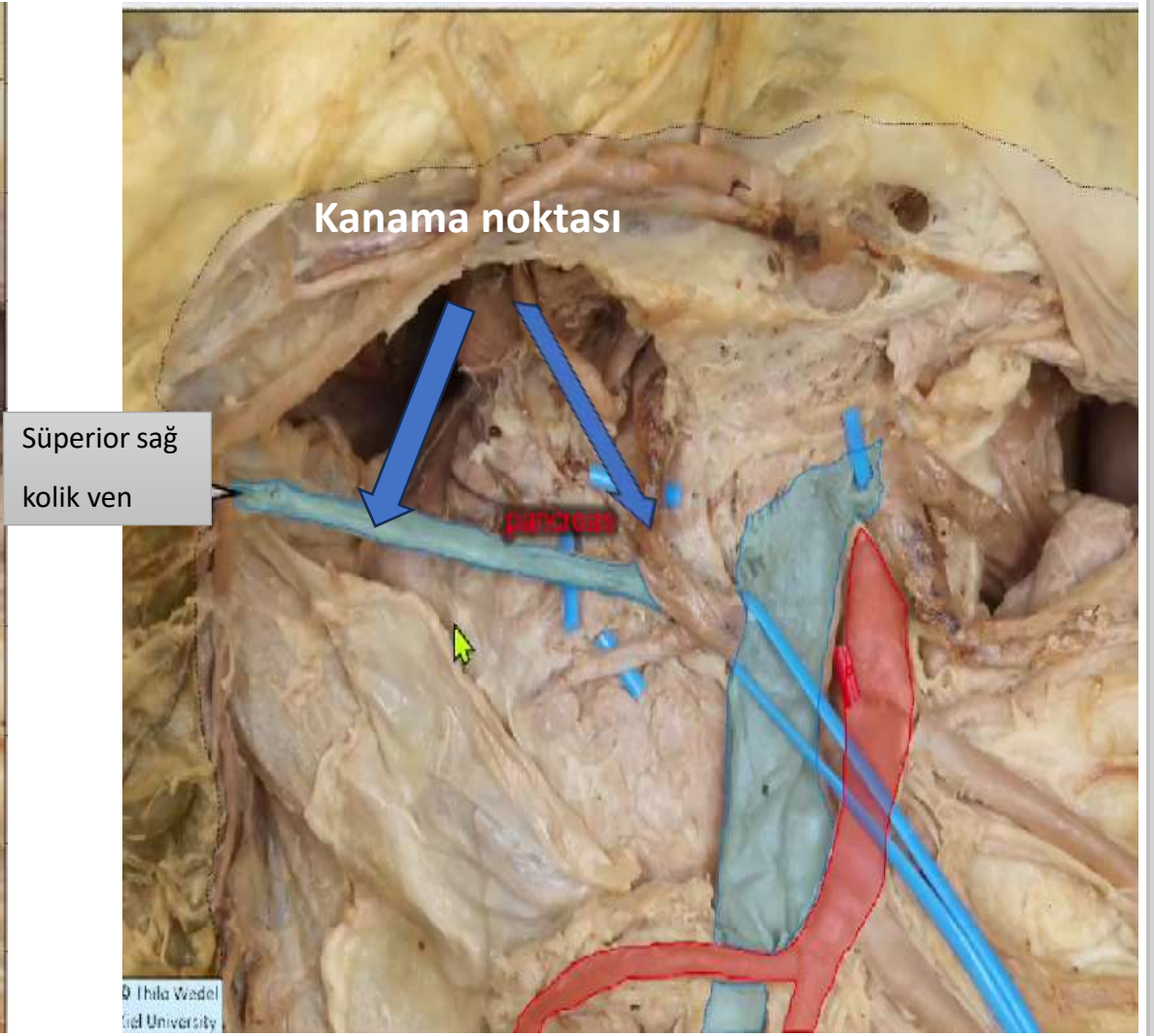
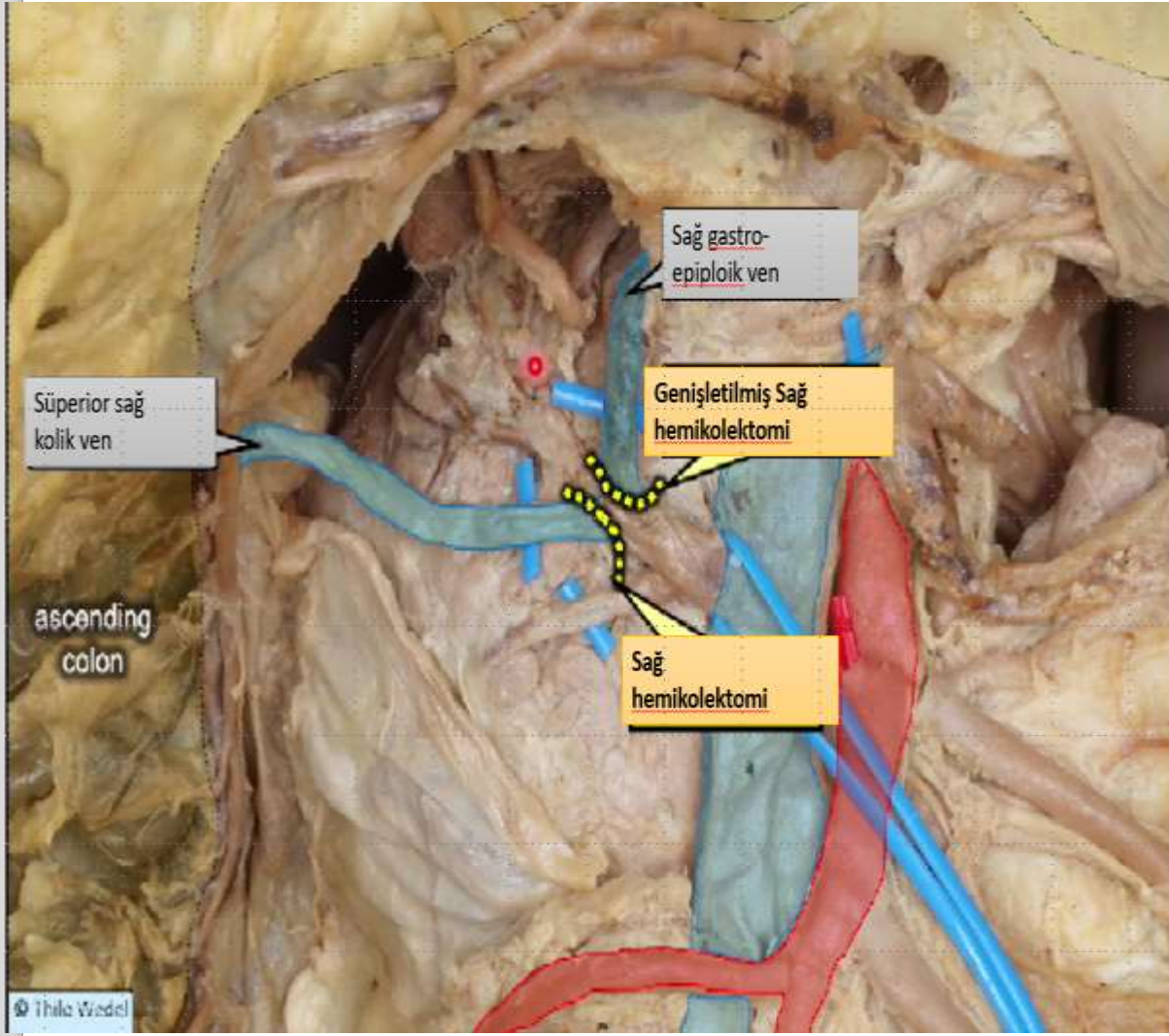
Gastropankreatikokolik Trunkus (Henle Trunkusu)



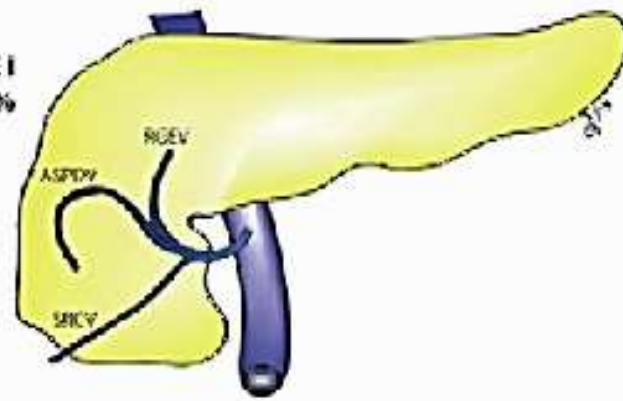


Gastropankreatikokolik Trunkus (Henle)

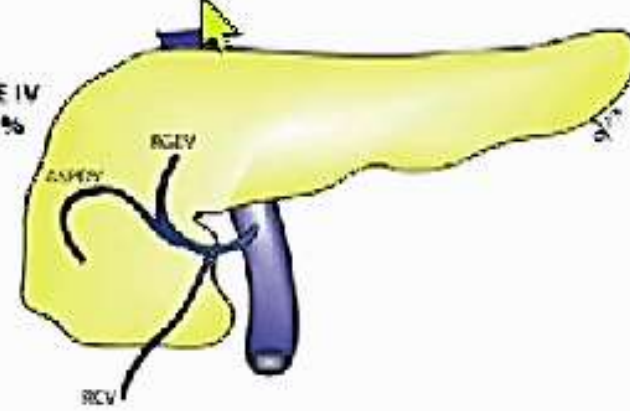




TYPE I
38.6%



TYPE IV
5.9%



TYPE II
26.7%

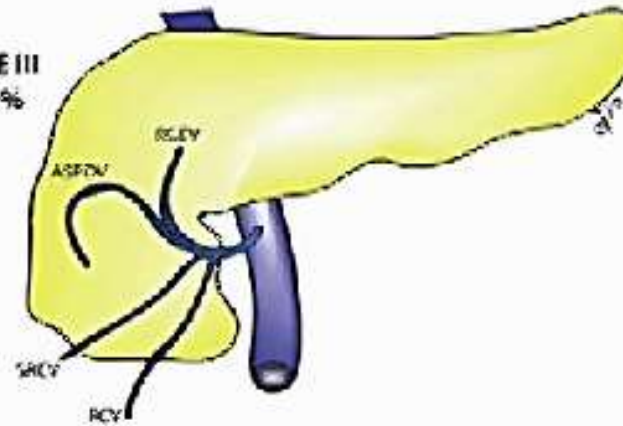


TYPE V
5.4%

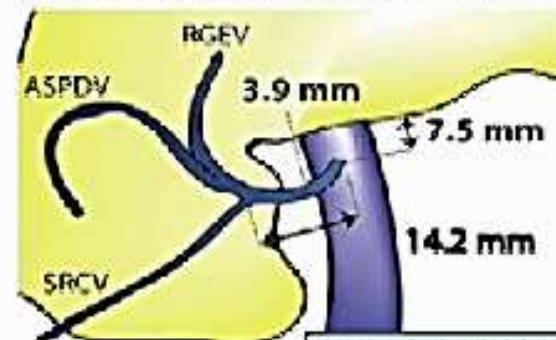


TYPE VI - all the others

TYPE III
9.5%

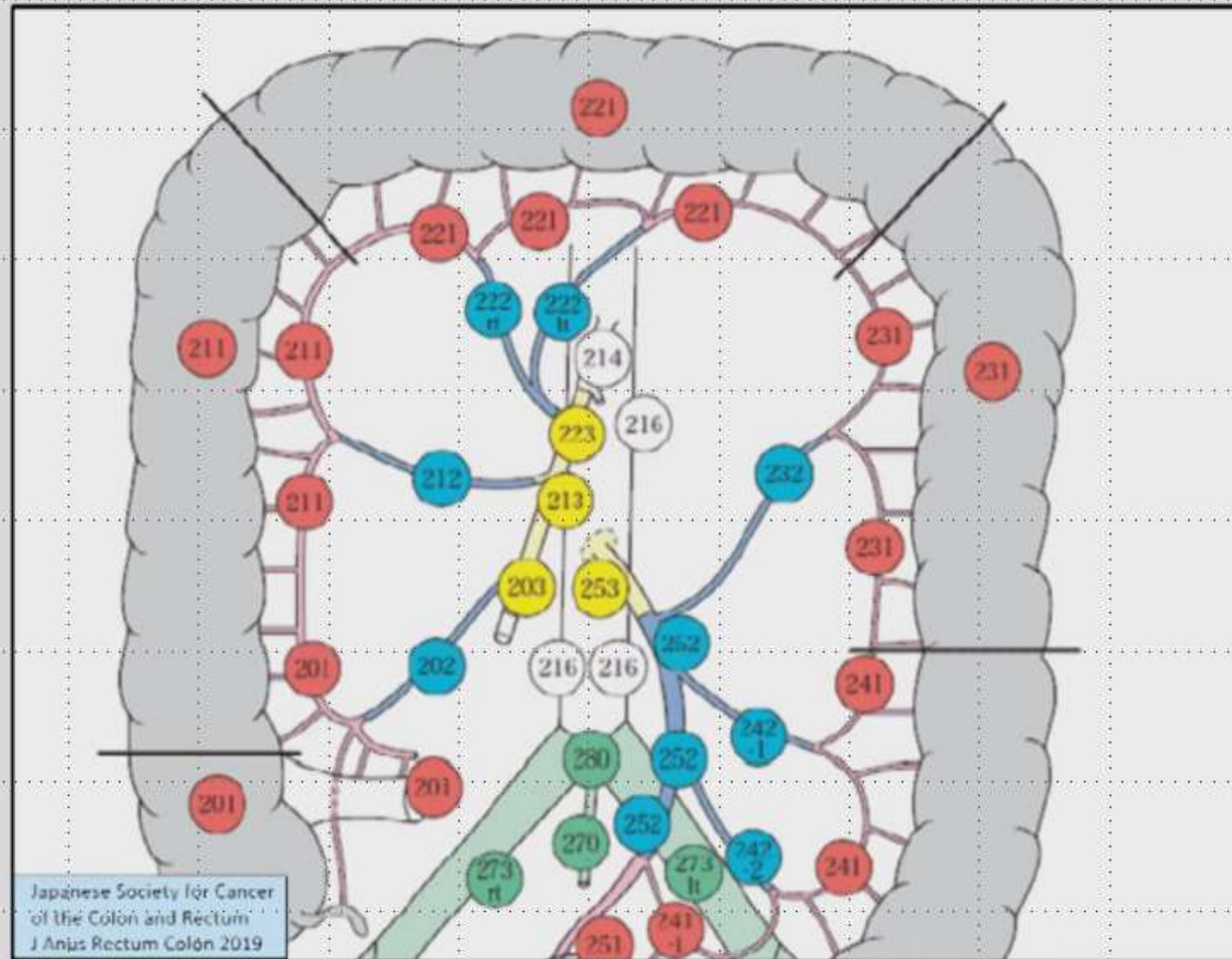


**Diameter, length,
distance from inferior border of the pancreas**

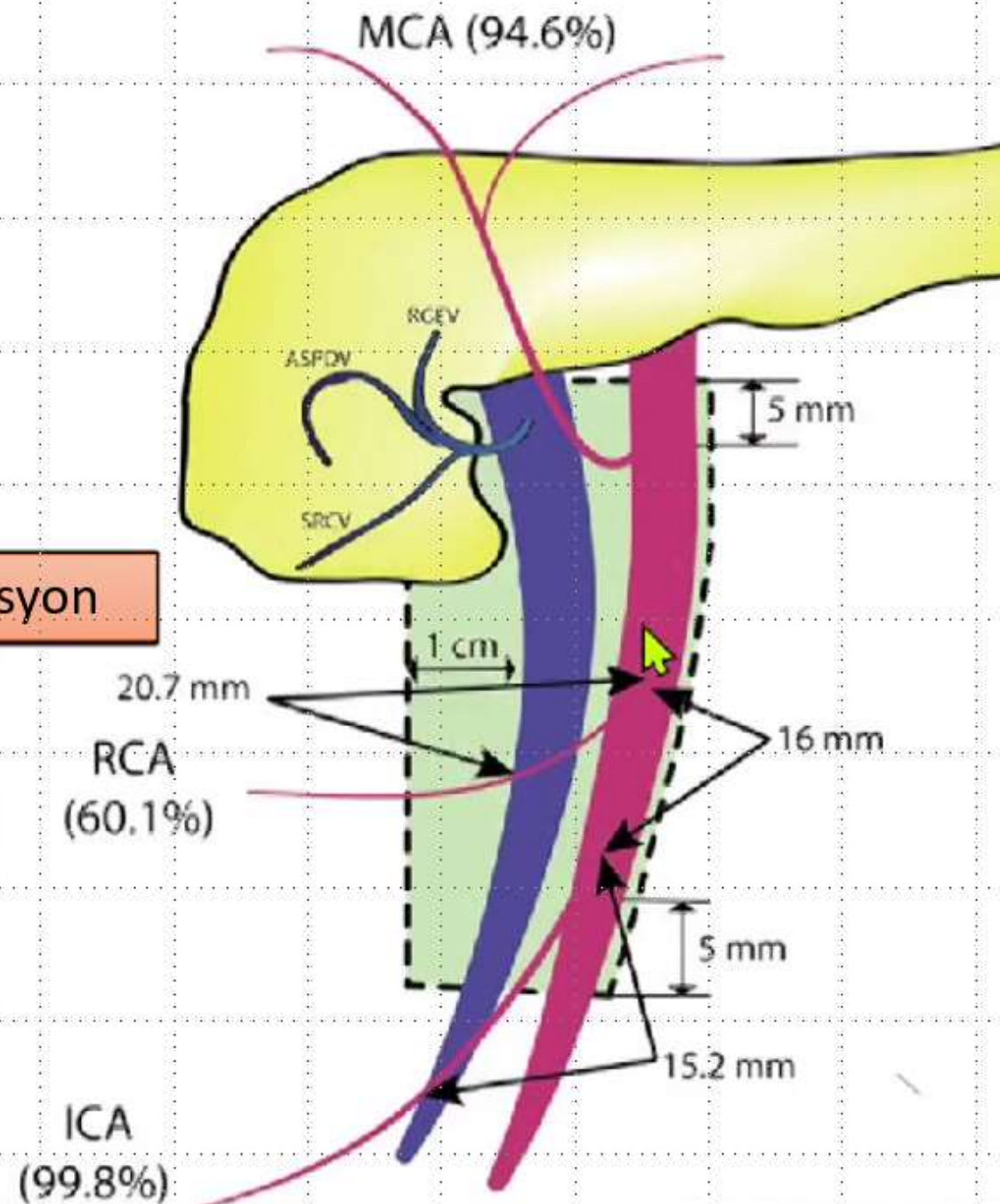


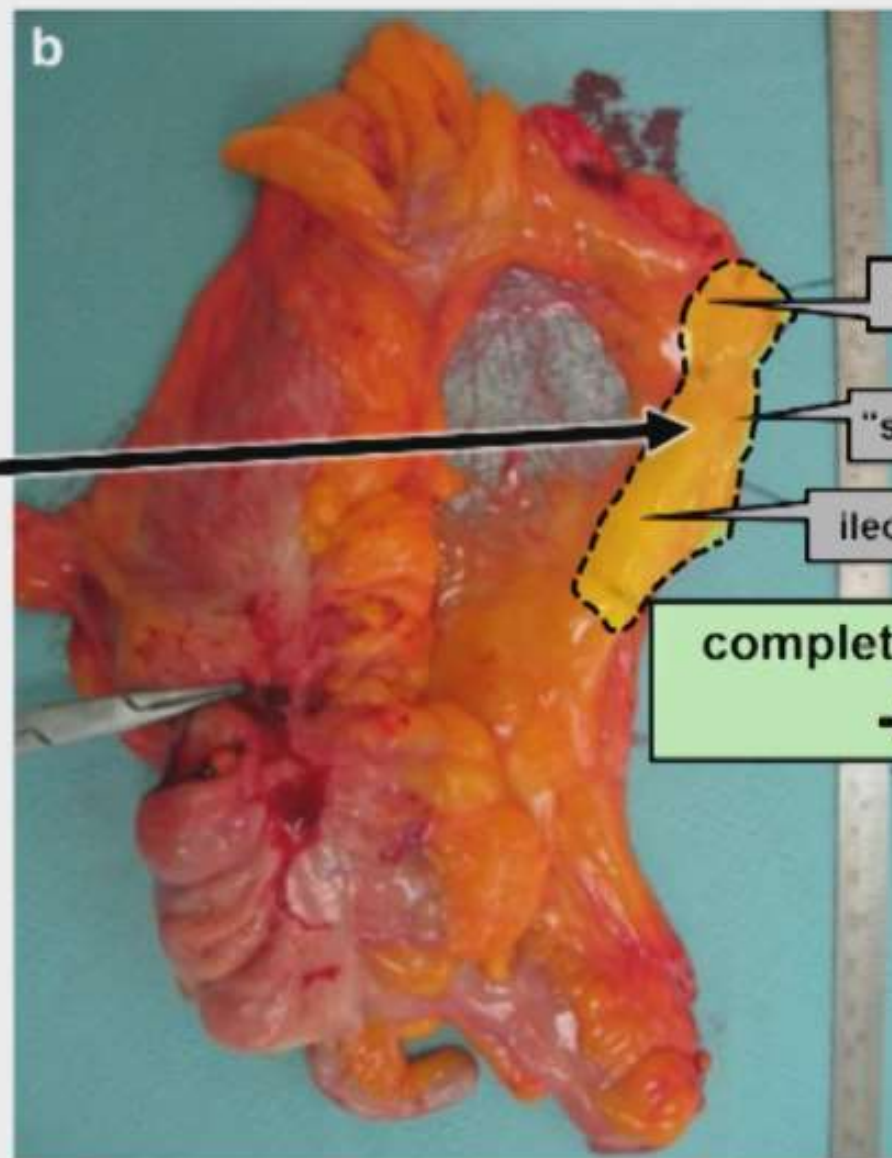
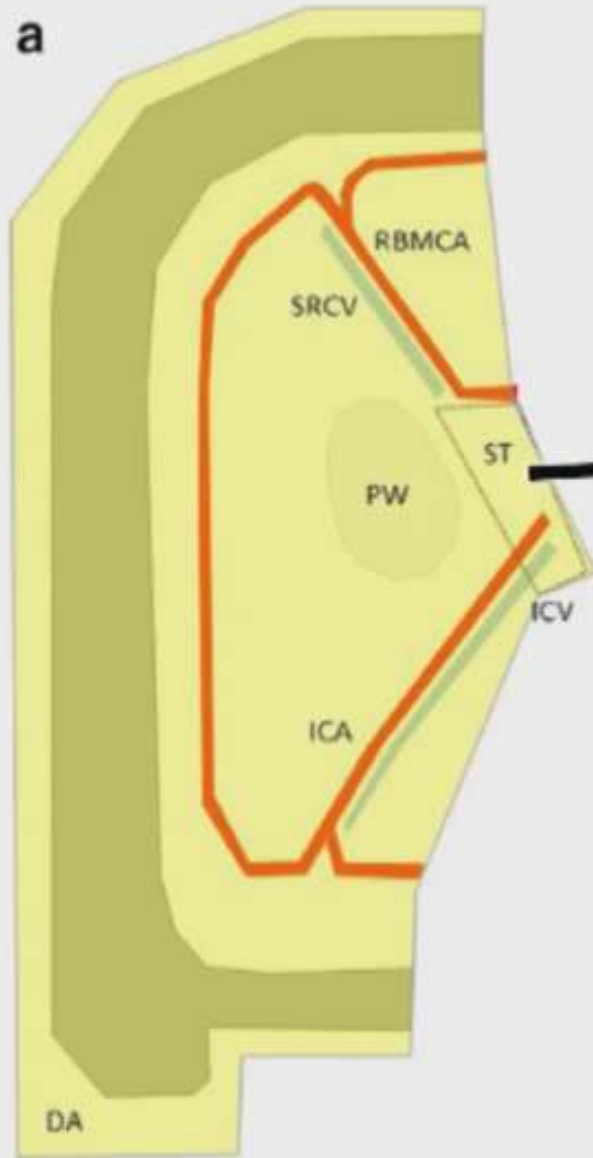
Lenfatik drenaj

Centripetal drenaj



Santral vasküler ligasyon





middle colic vessels/pedicle

"surgical trunk" $\approx$ axis of SMV

ileocolic vessels/pedicle

complete lymphonodectomy (D3)

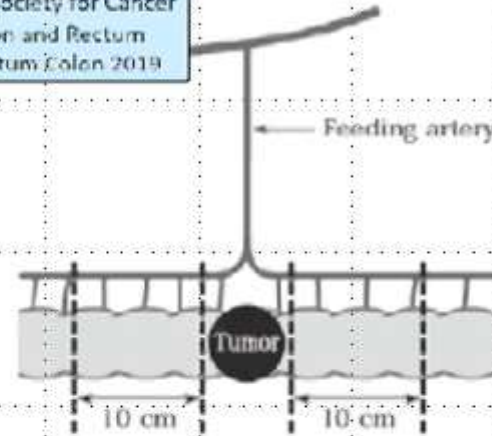
→ "surgical trunk"

Benz et al. 2019 Tech Coloproctol

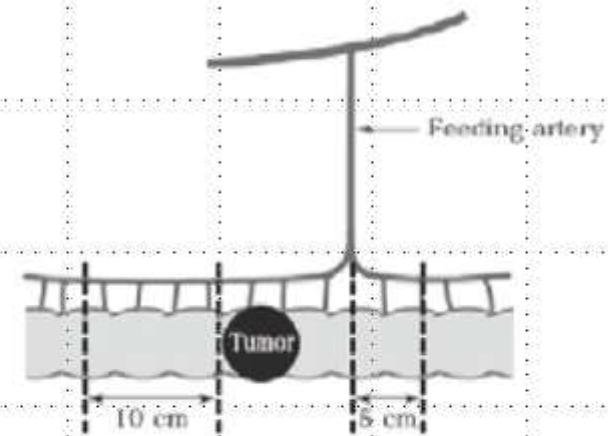
Lenfatik drenaj

Longitudinal drenaj

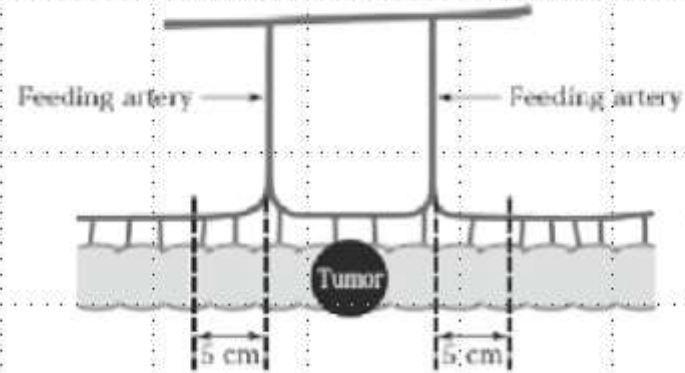
Japanese Society for Cancer
of the Colon and Rectum
[Anus Rectum Colon 2019]



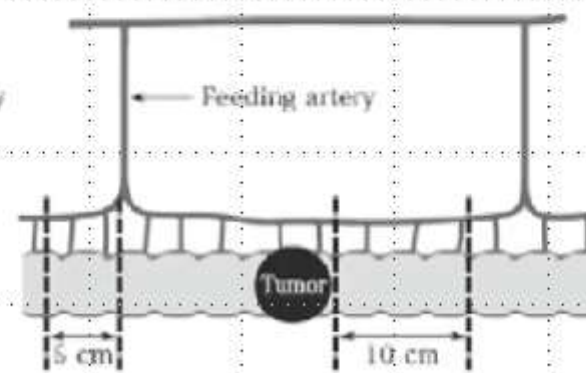
a. When there is a feeding artery in close proximity to the tumor



b. When there is only one feeding artery within 10 cm from the tumor margin



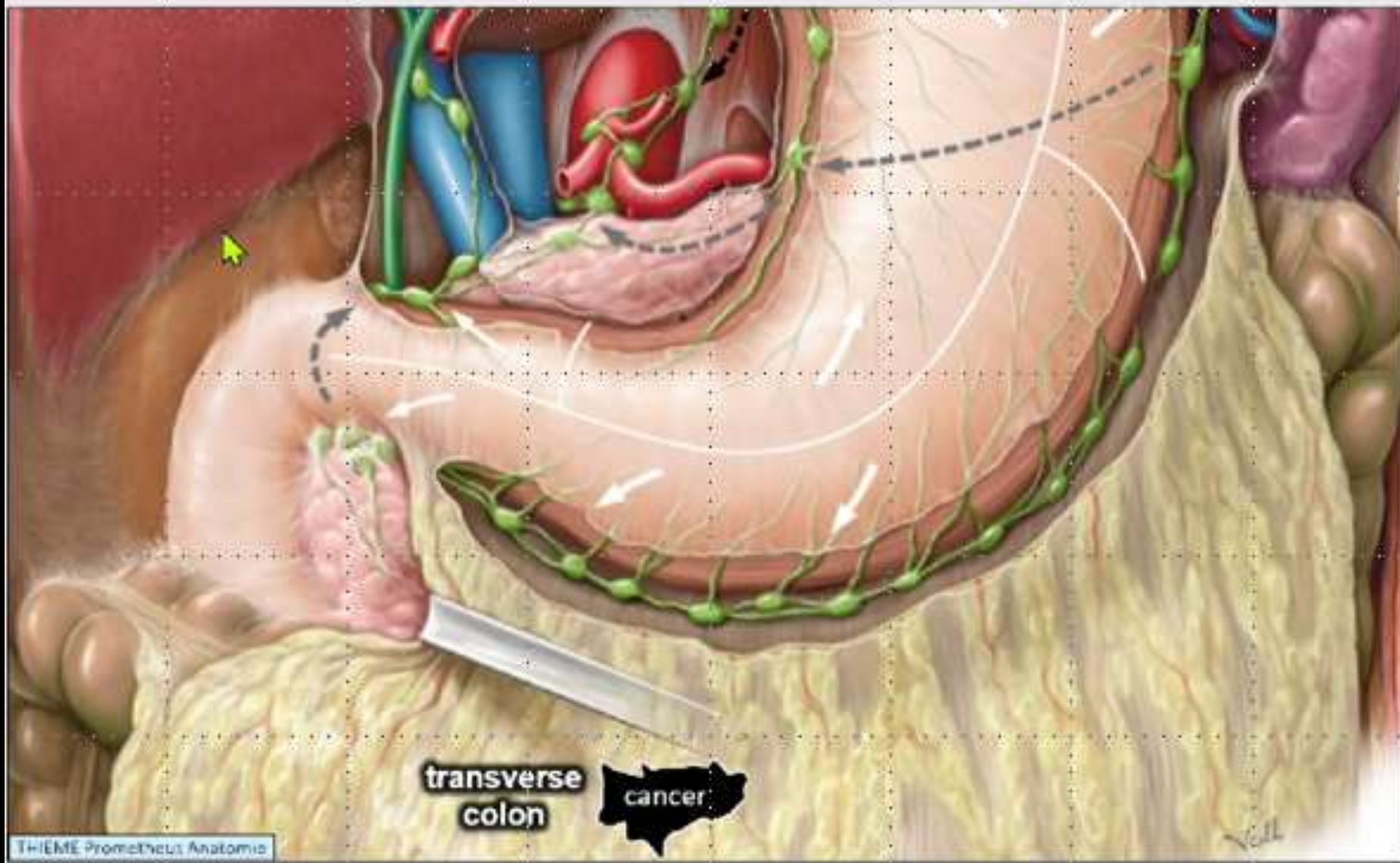
c. When there are 2 dominant arteries within 10 cm from the tumor margin



d. When there are no feeding arteries within 10 cm from the tumor margin, the artery closest to the tumor is regarded as its feeding artery

Lenfatik drenaj

Ekstramezokolik drenaj



- Rektumdaki gibi lenfatik yayılım primer olarak arterleri takip eden lenf drenajı ile olur ve bu kompartmanlarda mezokolon bir zarf gibi her iki taraftan viseral fasya ile sarılmıştır
- Bu teknikle arterler daha iyi ortaya konarak daha fazla lenf nodu çıkarılacak
- Kocher yapılarak duodenum mobilize ediliyor ve SMA köküne kadar diseksiyon yapılıyor. Pankreas unsinat proses bağlantılarından ayrılıyor
- Hep. Fleks. Tm %5 pankreas başı l.n. +
- %4 gastroepiploik ark l.n. +

Complete Mesocolic Ex

CME

Article

Standardized surgery for colonic cancer: complete mesocolic excision and central ligation – technical notes and

W. Hohenberger*, K. Weber*, K. Matzel*, T. Papadopoulos† and S. Merkel†

*Department of Surgery, University Hospital, Erlangen, Germany and †Department of Pathology, Vivantes Humboldt H

Received 5 August 2008; accepted 6 October 2008

Abstract

Objective Total mesorectal excision (TME) as proposed by R.J. Heald more than 20 years ago, is nowadays accepted worldwide for optimal rectal cancer surgery. This technique is focused on an intact package of the tumour and its main lymphatic drainage.

This concept can be translated into colon cancer surgery, as the mesorectum is only part of the mesenteric planes which cover the colon and its lymphatic drainage like envelopes. According to the concept of TME for rectal cancer, we perform a concept of complete mesocolic excision (CME) for colonic cancer. This technique aims at the separation of the mesocolic from the parietal plane and true central ligation of the supplying arteries and draining veins right at their roots.

Method Prospectively obtained data from 1329 consecutive patients of our department with RO-resection of

colon cancer between 1978 and 2000. Patient data of three subgroups were compared.

Results By consequent application of CME, we were able to reduce recurrence rates in colon cancer from 6.5% in 1978 to 1984 to 3.6% in 1995 to 2000. cancer related 5-year survival rate after cure increased from 82.1% to 8

Conclusion The technique of CME surgery aims at a specimen with maximum of lymphnode harvest and lower local recurrence rates and

Keywords Colon cancer, Standardized, complete mesocolic excision

- 1978-2002 arasında
- 1438 primer kolorektal tümör nedeni başvuran hasta
- Takip 2006 yılında bitmiş.
- Neoadj. Ted almamış
- FAP, üls. Kolit olmayan
- Çeşitli sebeplerden 109 hasta çalışma dışı
- Sonuçta 1329 hasta ort. 103 ay takip(1-335)

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- Çekum asendan kolon
 - İleokolik ve varsa sağ kolikle birlikte orta kolik sağ dalı
- Transvers kolon
 - Orta kolik kökü bağlanır
 - Sağ gastroepiploik arter/ven
- Hep. Fleks tm kolon transeksiyonu splenik fleksura hizasında

Complete Mesocolic Ex

CME

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Keywords Colon cancer, Stand

ment, complete mesocolic exci

- 1. sonlanım: kanser ilişkili sürvi
- 2. sonlanım: lokorejyonel nüks, çıkarılan len nodu sayısı, post-op morbidite ve mortalite
- Mort %3.1 (45), Komplik. %19.7(283)
- L:Nodu
 - <28 %90.7 5 yıl sürvi (%64.6)
 - >28 %96.3 (%71.7)
- Lokal nüks
 - Tüm hastalarda %4.9
 - %6.5 ten %3.6 ya gerilemiş.
- Kanser ilişkili sürvi %82.1---%89.1

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EDITORIAL

Complete mesocolic excision: Techniques and outcomes

- Mevcut CME vs standart karşılaştırmaları retrospektif
- West ve ark Almanyada CME yaptıkları merk. İngilteredeki standart spesimenleri karşılaştırdığında daha doğru anatomik planda çalışmışlar (%92 vs %40) ve daha çok I. nodu çıkarmışlar (30 vs 18)
- Danimarkadan 6 hastane standart sağ hemikolektomi ve Hillerod hastanesinin CME ameliyatları karşılaştırmasında
 - Standart: piyes yüzey alanı ort 87.1 cm², CME de ise 144.6 cm²
 - Lenf nodu standart 18 vs CME 28
- Galizia ve ark. daha fazla I. nodu ve daha uzun damar yanı sıra daha yüksek tümör depoziti çıkarıldığını bildirmişler. (Ctx in upstaged patients)

Complete mesocolic excision: Techniques and outcomes

Onkolojik sonuçlar

- West ve ark. %15 daha iyi 5 yıllık sürvi
- Galizia –rekürrens ve sürvi karşılaştırması
 - CME grubunda lokal nüks yok
 - Uzak met. Oranı aynı
- Danimarka çalışması
 - CME grubunda 4 yıllık sürvi %85.8
 - Non-CME grubunda %75.9
 - COX regr. Analizine göre CME prognostik faktör



Complete mesocolic excision for right hemicolectomy: an updated systematic review and meta-analysis

G. De Lange¹ · J. Davies^{3,4} · C. Toso^{1,2} · G. Meurette^{1,2} · F. Ris^{1,2} · J. Meyer^{1,2} 

- 586+18 yayın bulunmuş. Sonuçta 24 yayın
- Mezokolik eks. Çıkan lenf nodu sayısını artırmış
- 5 yıllık genel sağkalım ve hastalıksız sağkalım artmış
- Lokal nüks oranı azalmış
- Perioperatif morbiditede fark yok
- Sonuç: primer sağ kolon tümöründe morbidite ve mortaliteyi arttırmadan CME onkolojik sonuçları daha iyi

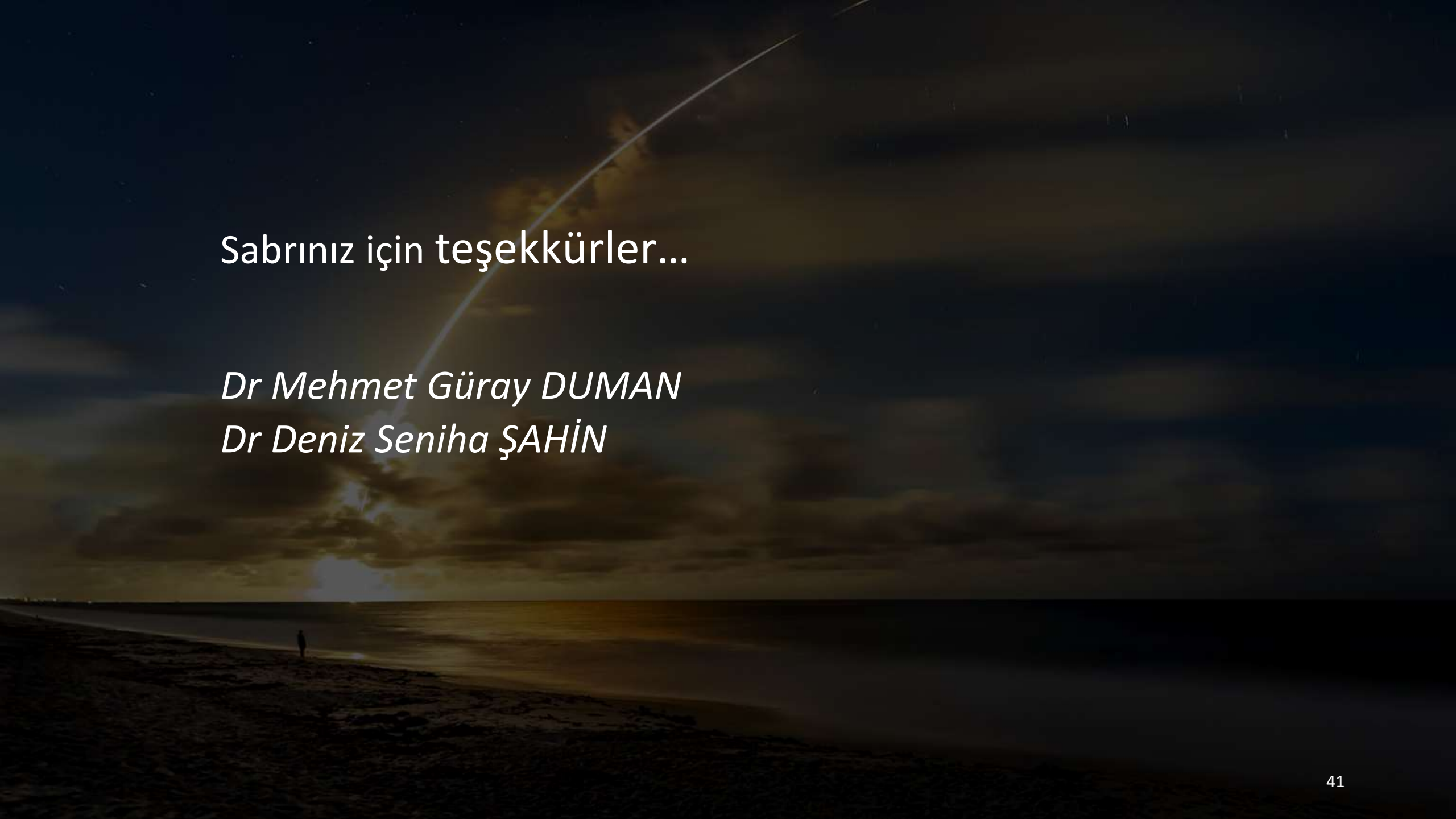


Eve giderken

- Embryoloji
- Mezo
- Arterler
- Venler
- Lenf nodları

hakkında yeterli bilgi sahibi olunmalıdır...





Sabrınız için teşekkürler...

Dr Mehmet Güray DUMAN
Dr Deniz Seniha ŞAHİN