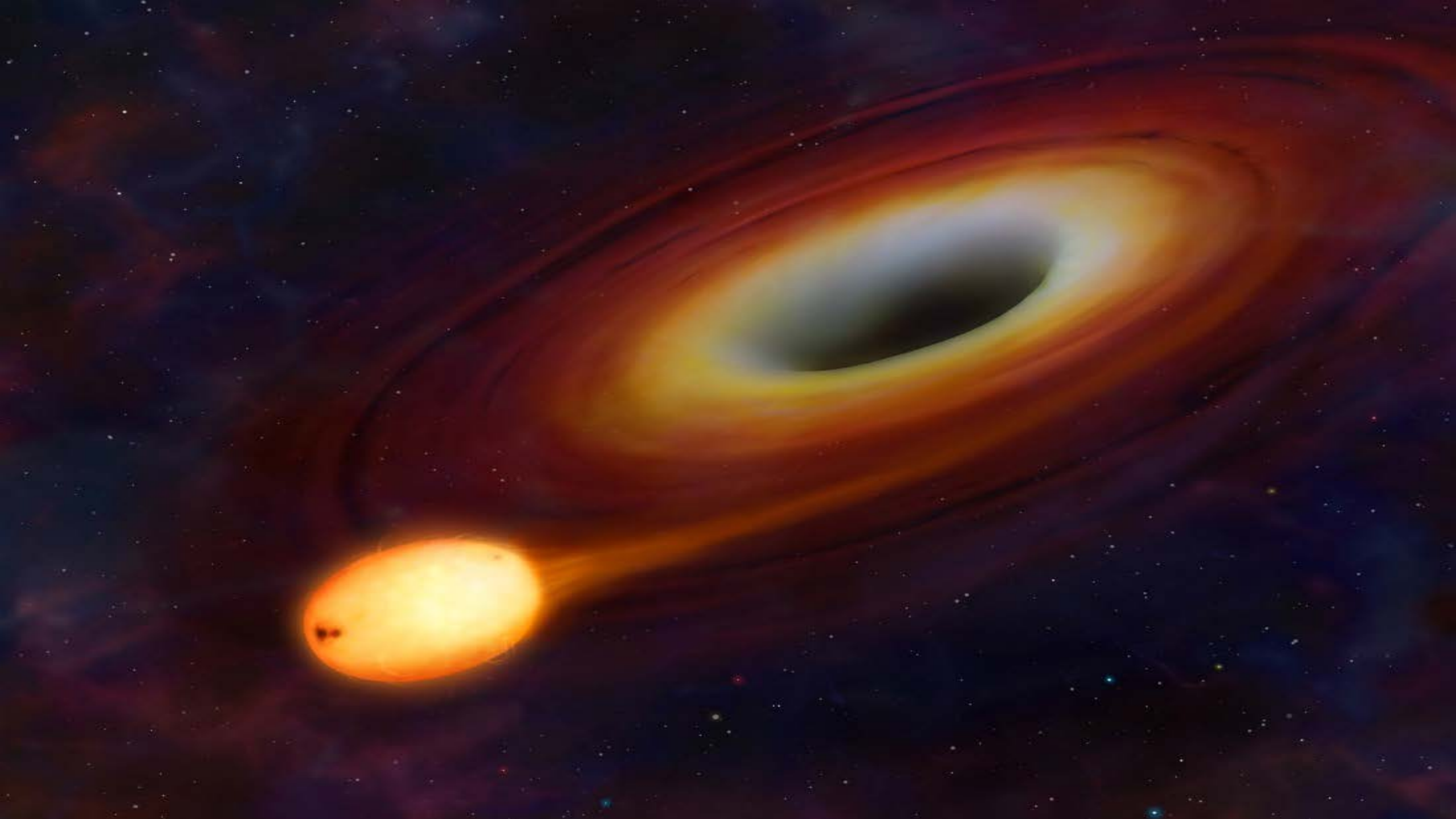




Black holes: how best to make them and what to do when they suck up your soul

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Head of colorectal surgery Chris Hani Baragwanath Academic Hospital

Colorectal surgery unit Wits Donald Gordon Medical Centre

black hole

noun

noun: **black hole**; plural noun: **black holes**; noun: **blackhole**;
plural noun: **blackholes**

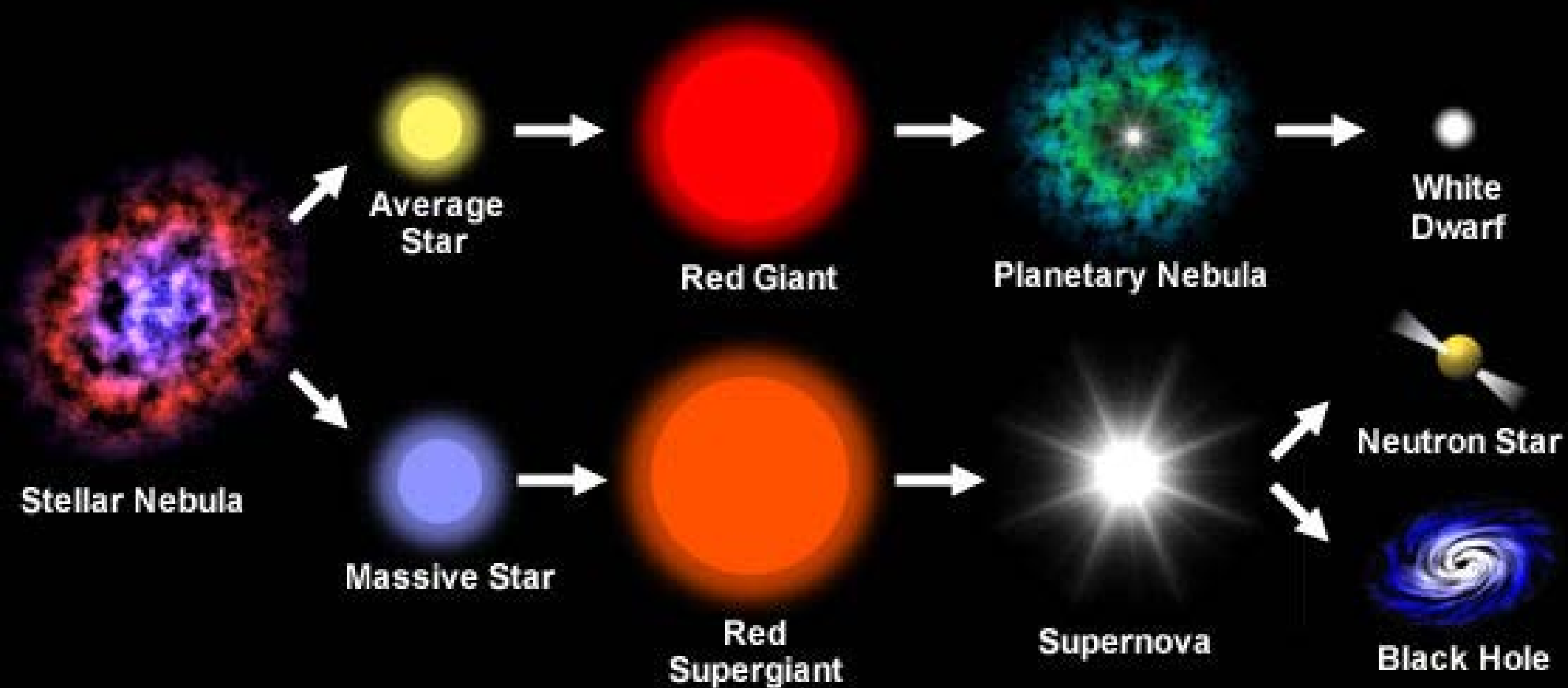
1.Astronomy

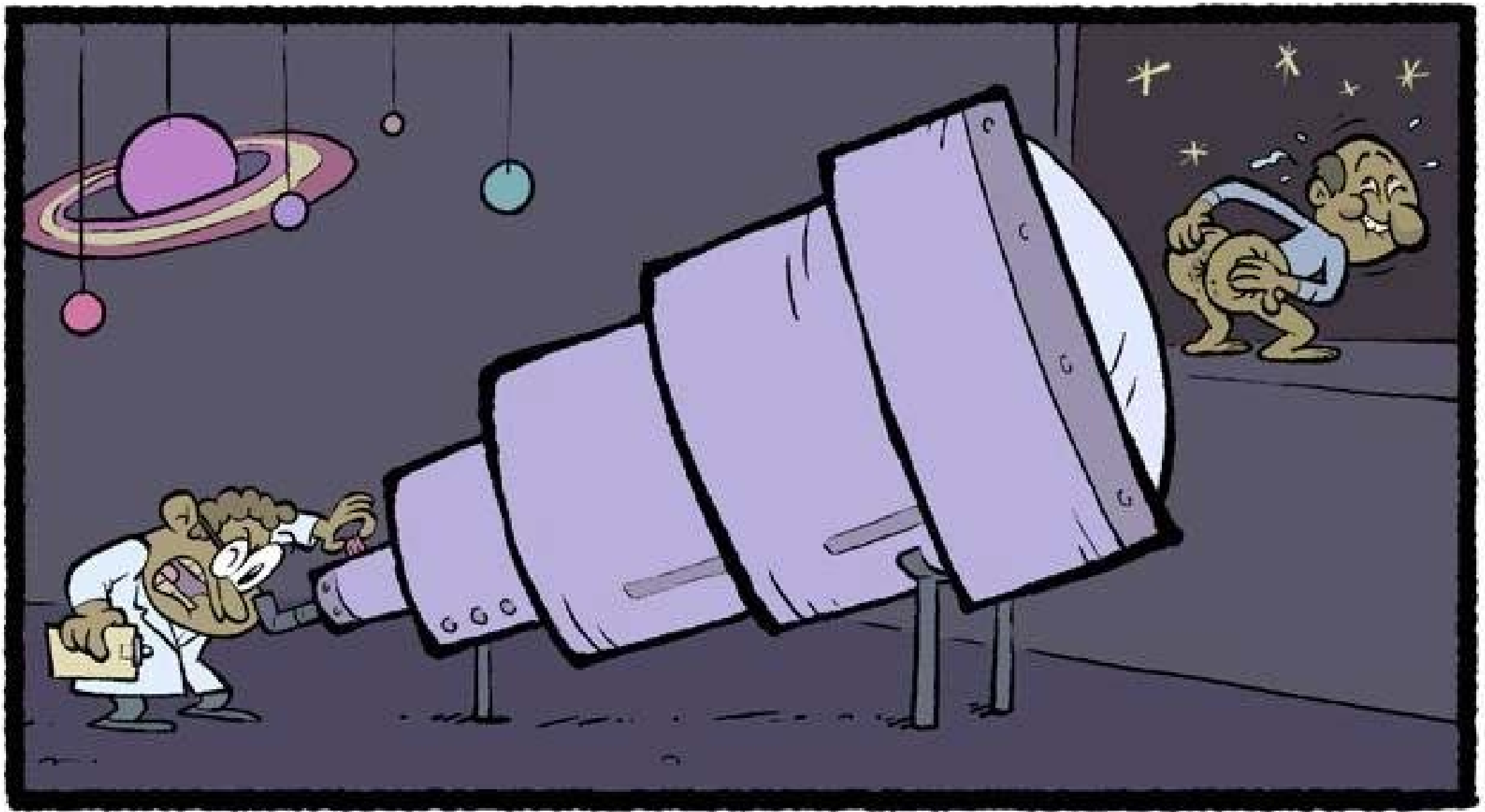
2.a region of space having a gravitational field so intense that
no matter or radiation can escape.

A dramatic space scene featuring a black hole with a bright, swirling accretion disk in shades of orange and yellow. A bright star is visible in the distance, and a large, blue, turbulent nebula or gas cloud is on the right. The background is a dark, star-filled space.

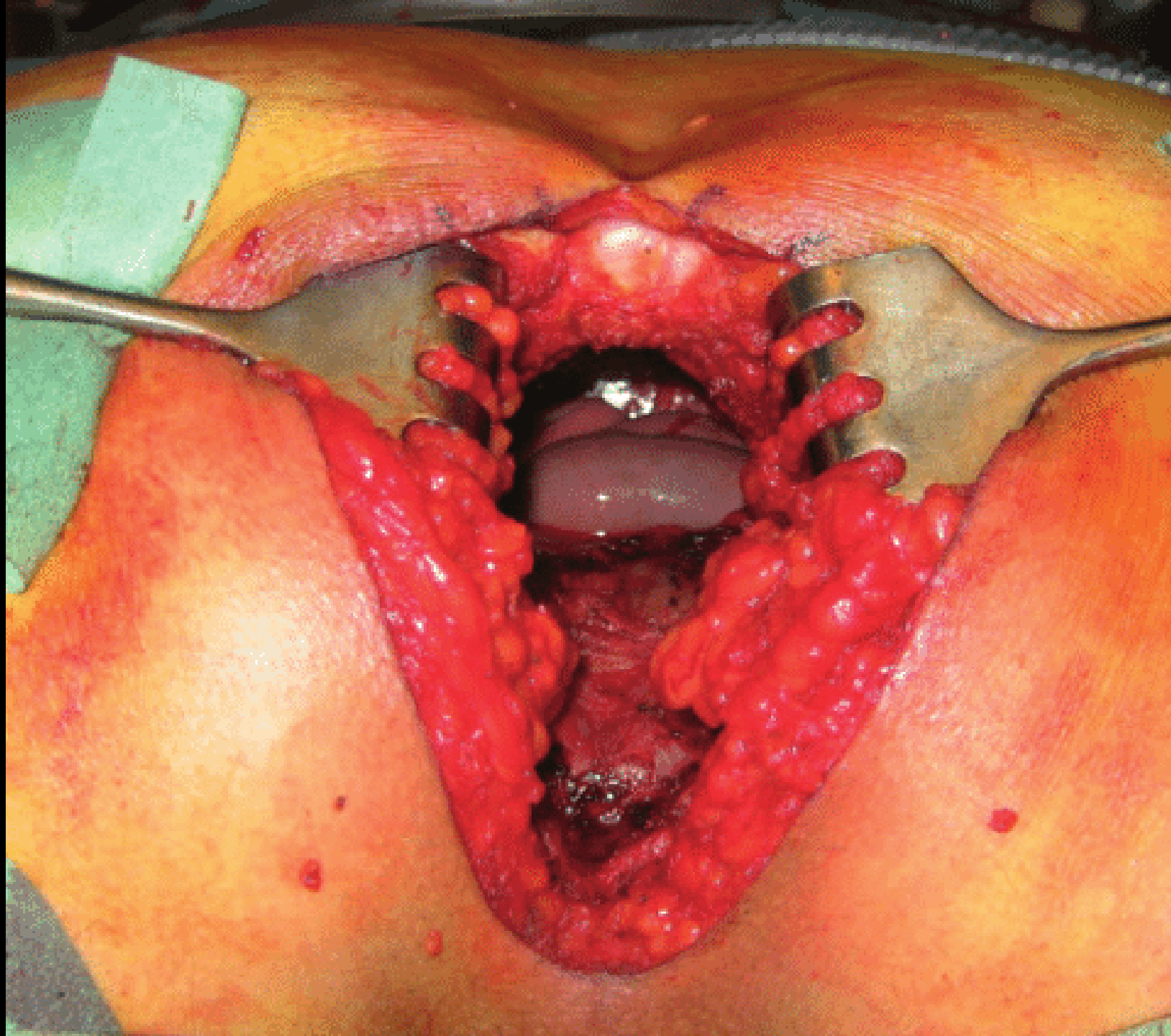
HOW TO BUILD A BLACK HOLE

Life Cycle of a Star



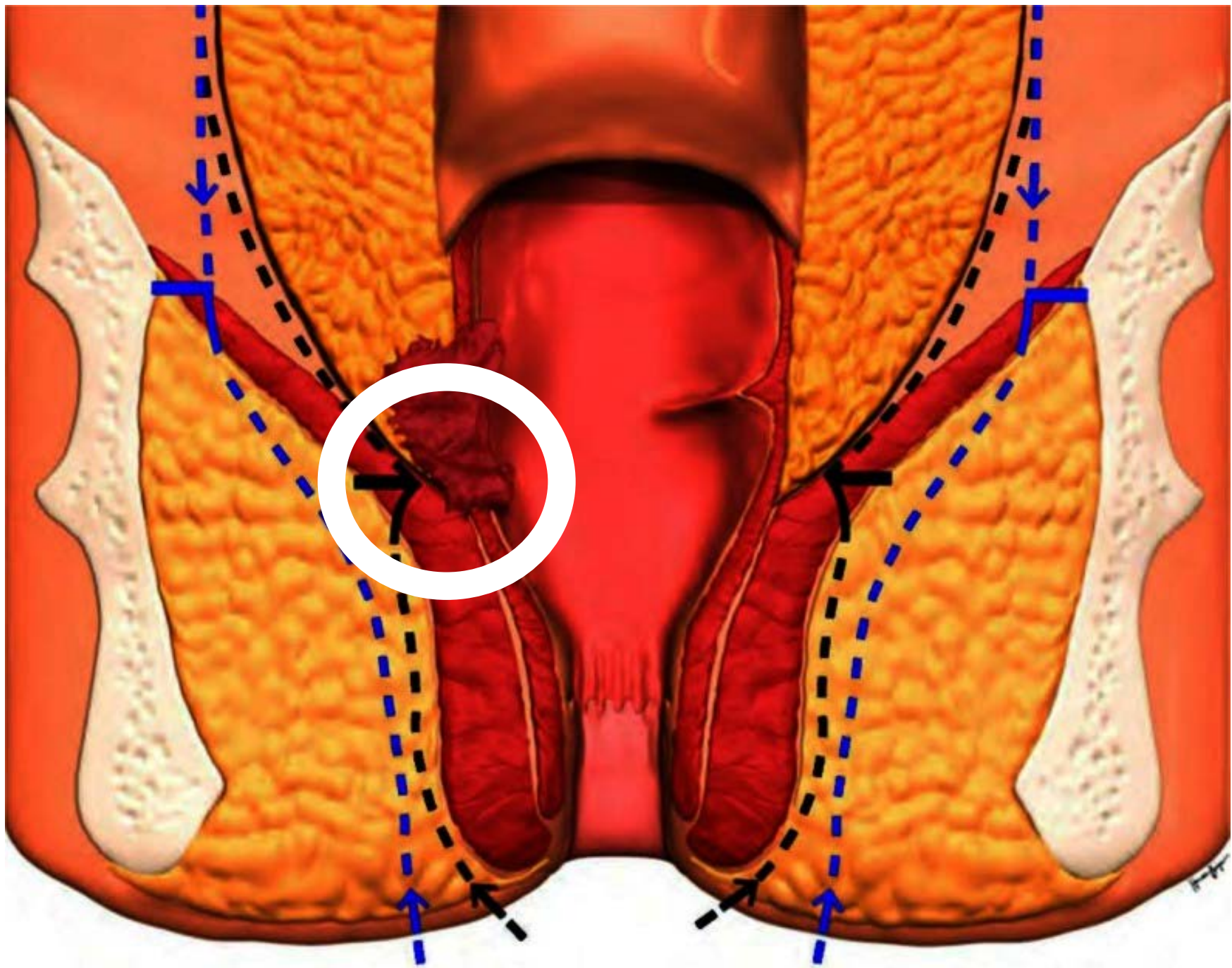


COME QUICK, DR. HUBBLE! I'VE DISCOVERED
A BLACK HOLE AND RESIDUAL DARK MATTER! FJ



History

- APR increased recurrence rates compared to LAR
- “waisting”
- 2006 ELAPE
- little good data

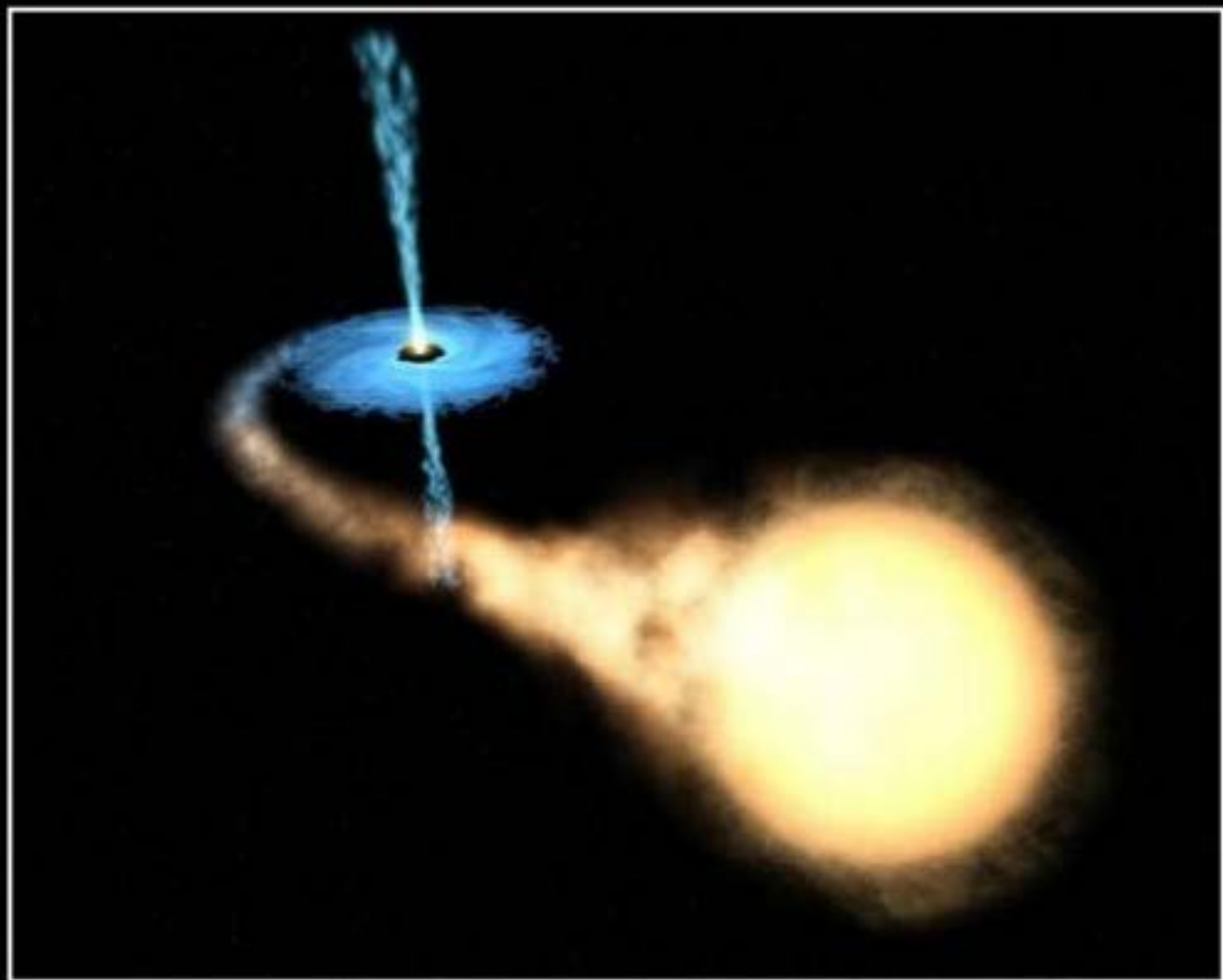


APR



ELAPE





BLACK HOLES

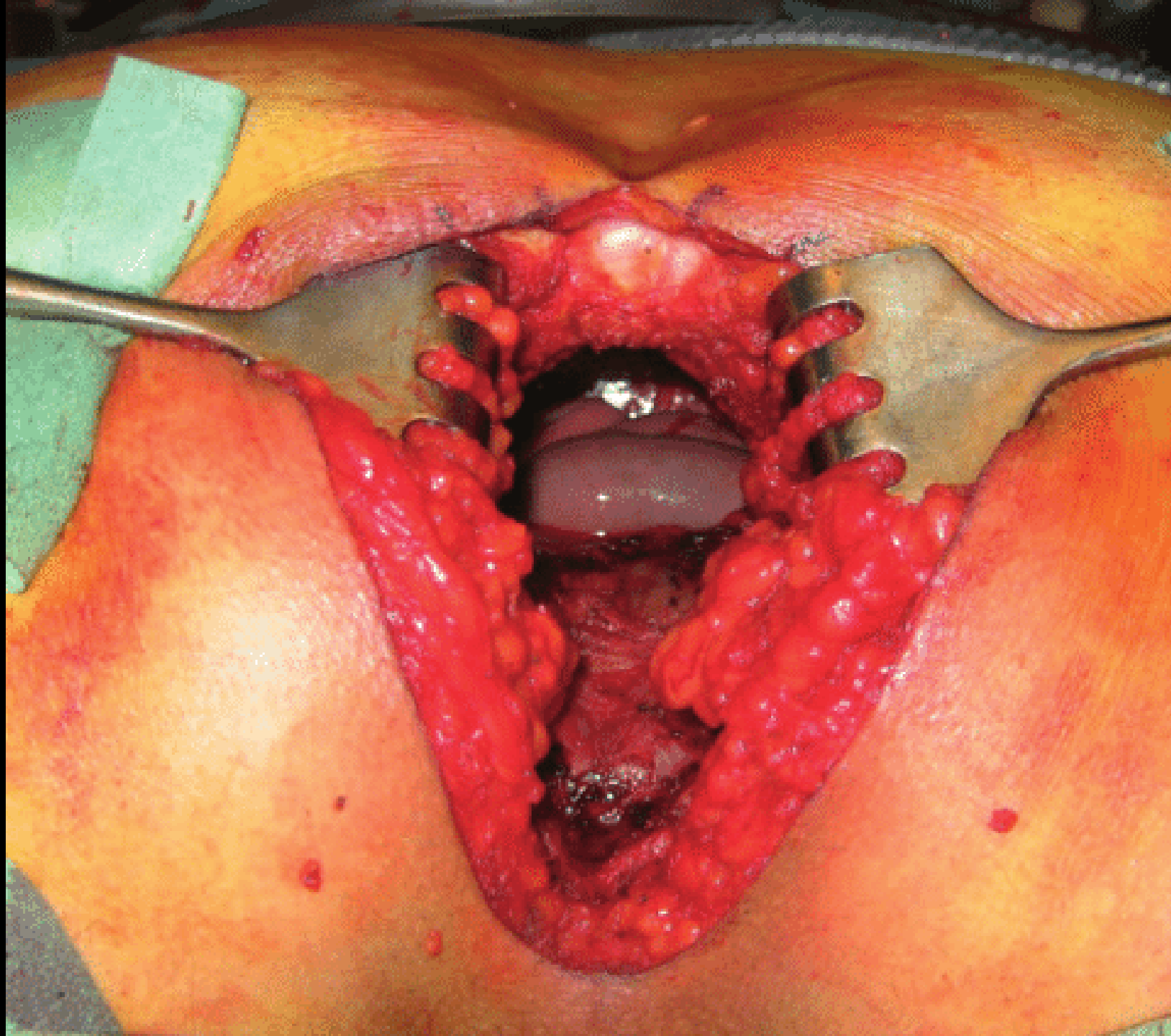
OM NOM NOM NOM.

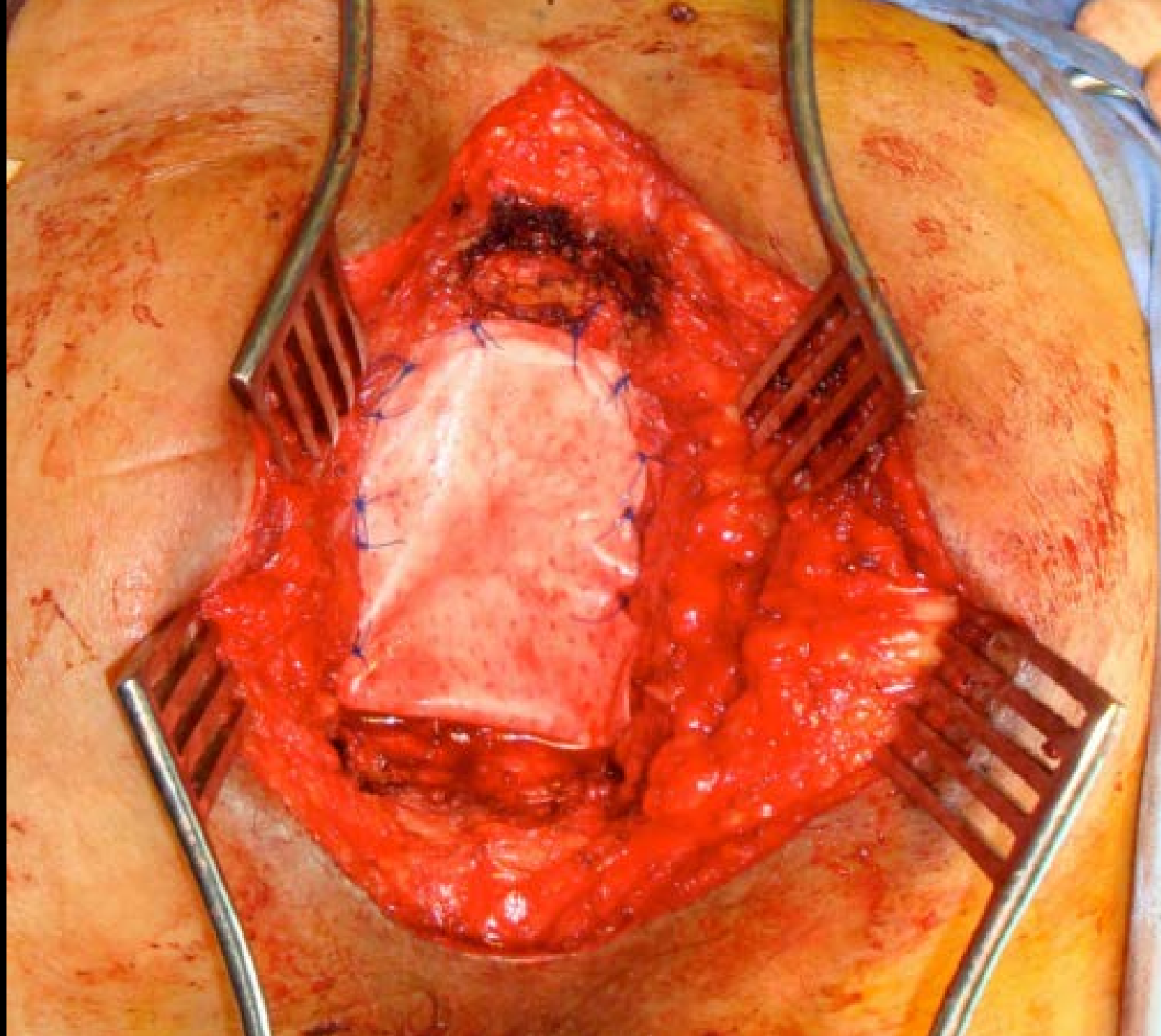
Controversy #1: best oncological resection

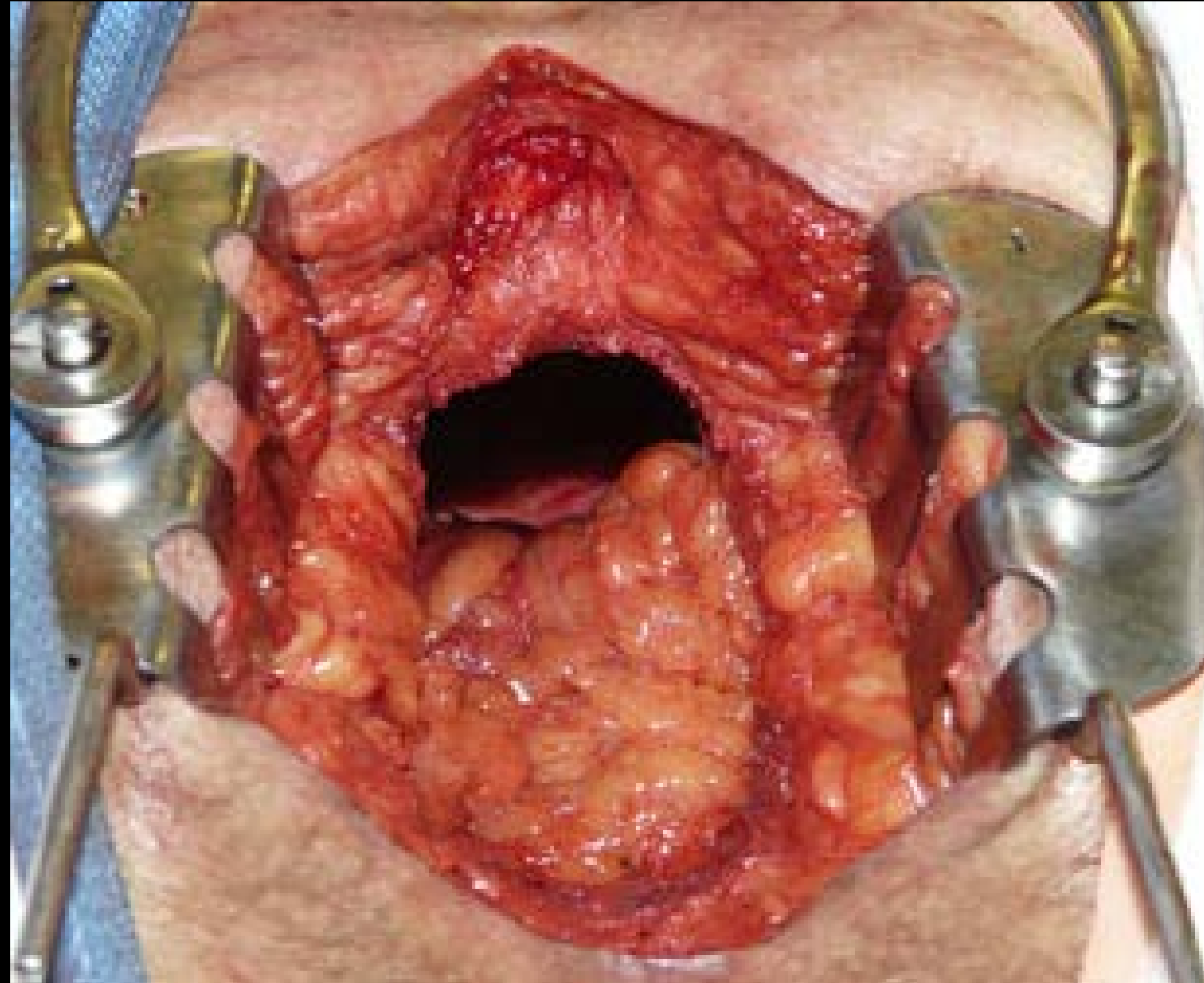
- Recent South African study: no difference
- International: conflicting
 - No difference
 - Favour ELAPE
- Some studies have shown superiority of ELAPE
- None have demonstrated inferiority

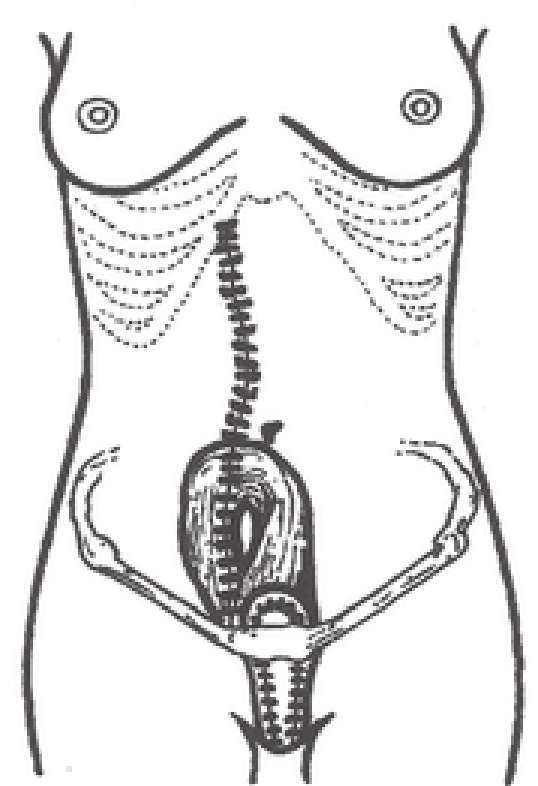
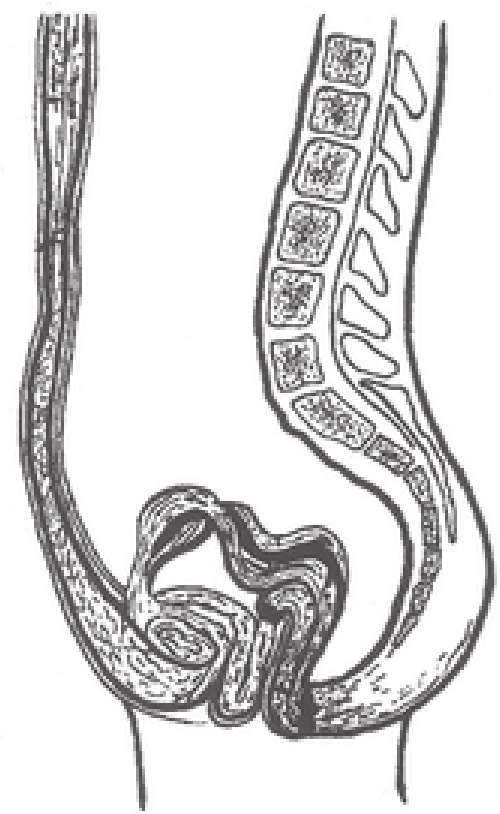
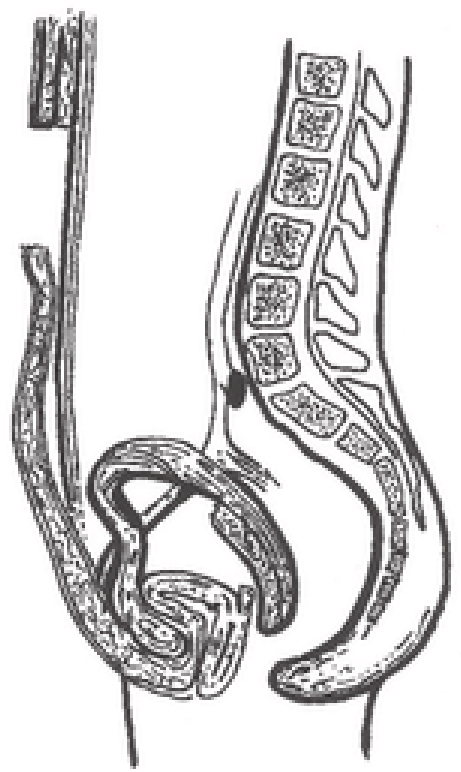
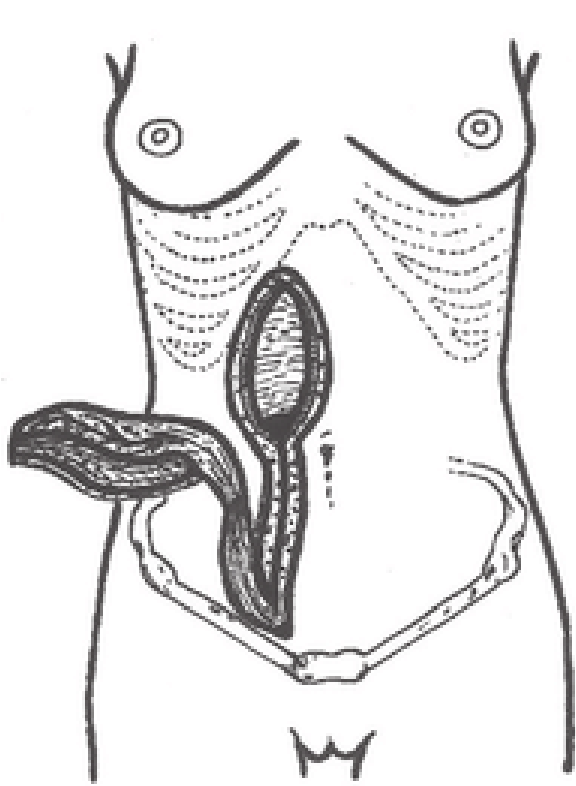
Controversy #2: Quality of life

- ELAPE: large defect in the pelvic diaphragm
 - herniation of abdominal contents
 - strangulation
- Mesh
- Omentoplasty
- Flap
- Quality of life: equivalent

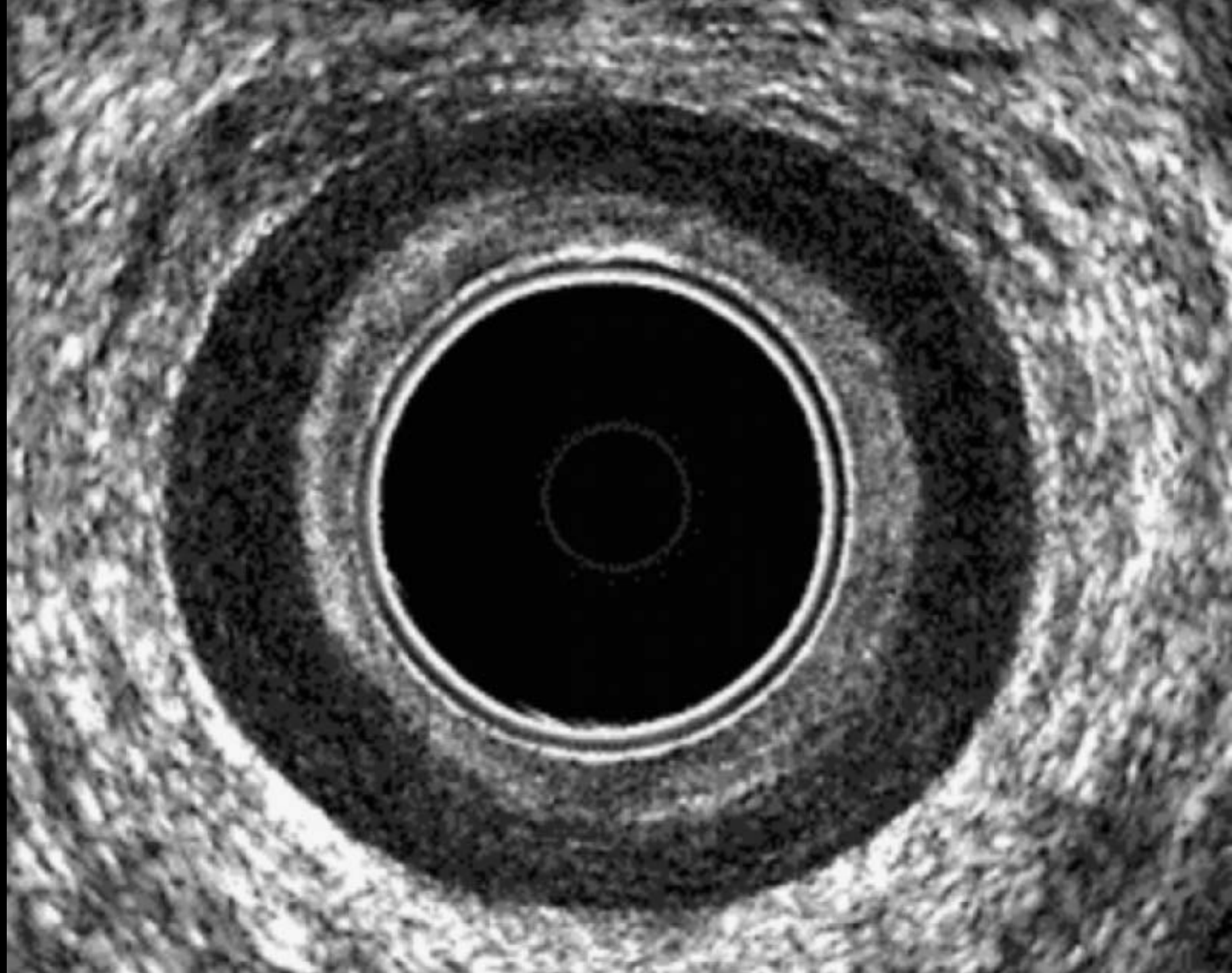








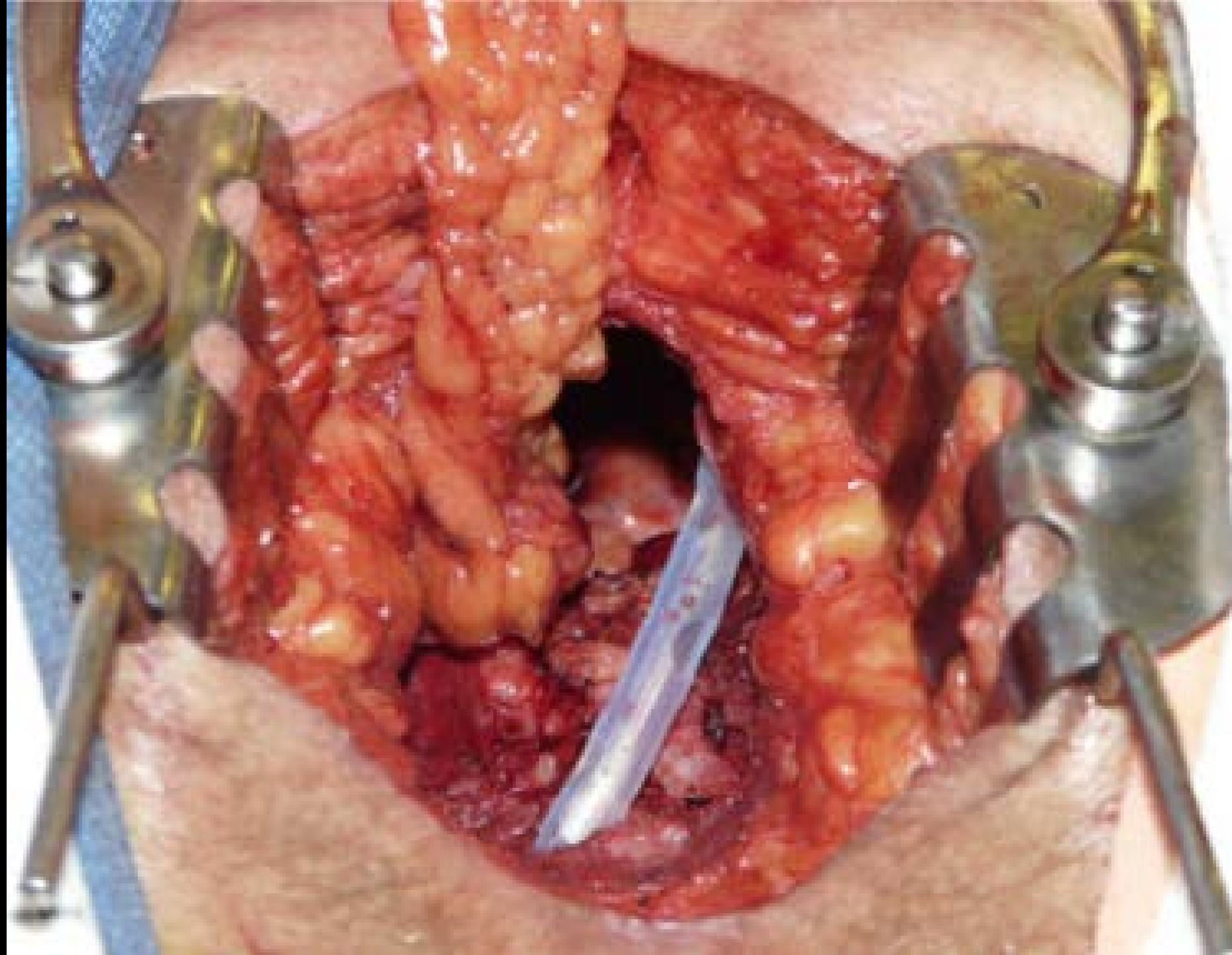


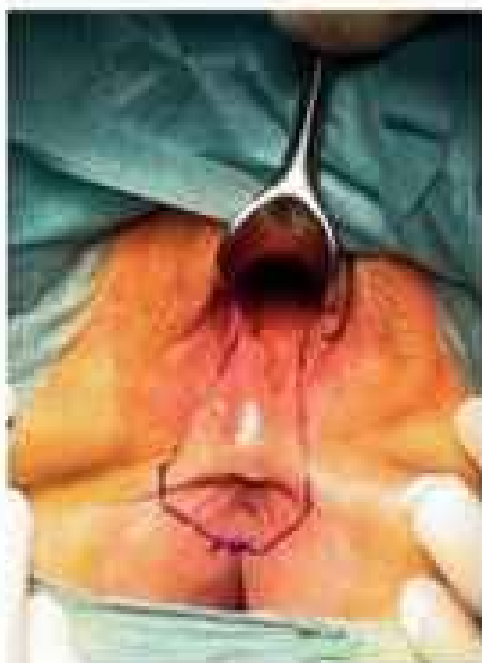


Controversy #3: perineal wound healing

- Chemoradiotherapy
- Primary closure
- Omentoplasty
- Flap
- Make the incision smaller
- Studies: no difference in the rate of wound complications







My brain is a black hole



**Stuff enters there and
never comes out!**

Take home messages

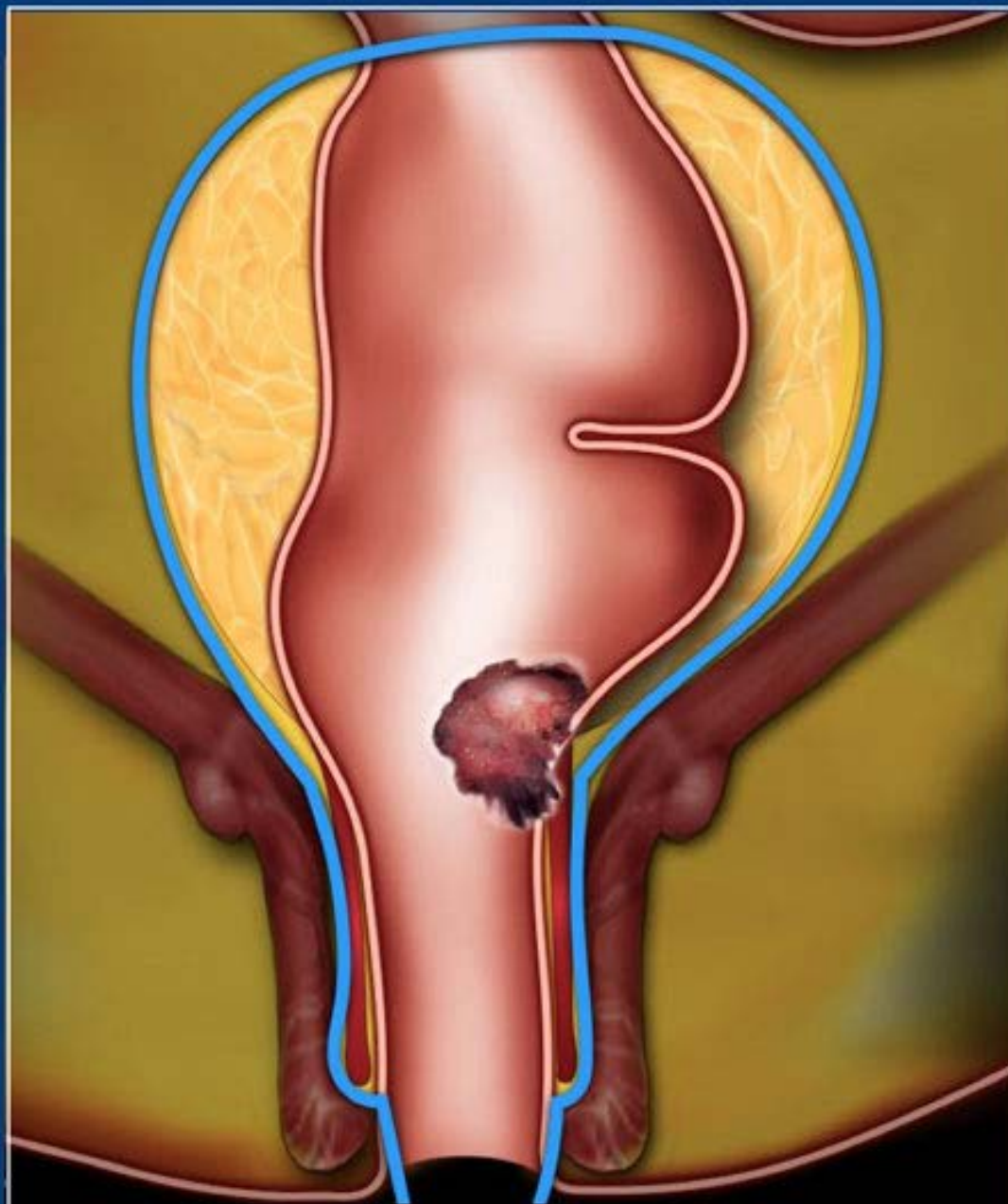
- Long term data is limited
- Equivalent quality of life
- ELAPE non inferior to APR

MEANWHILE IN

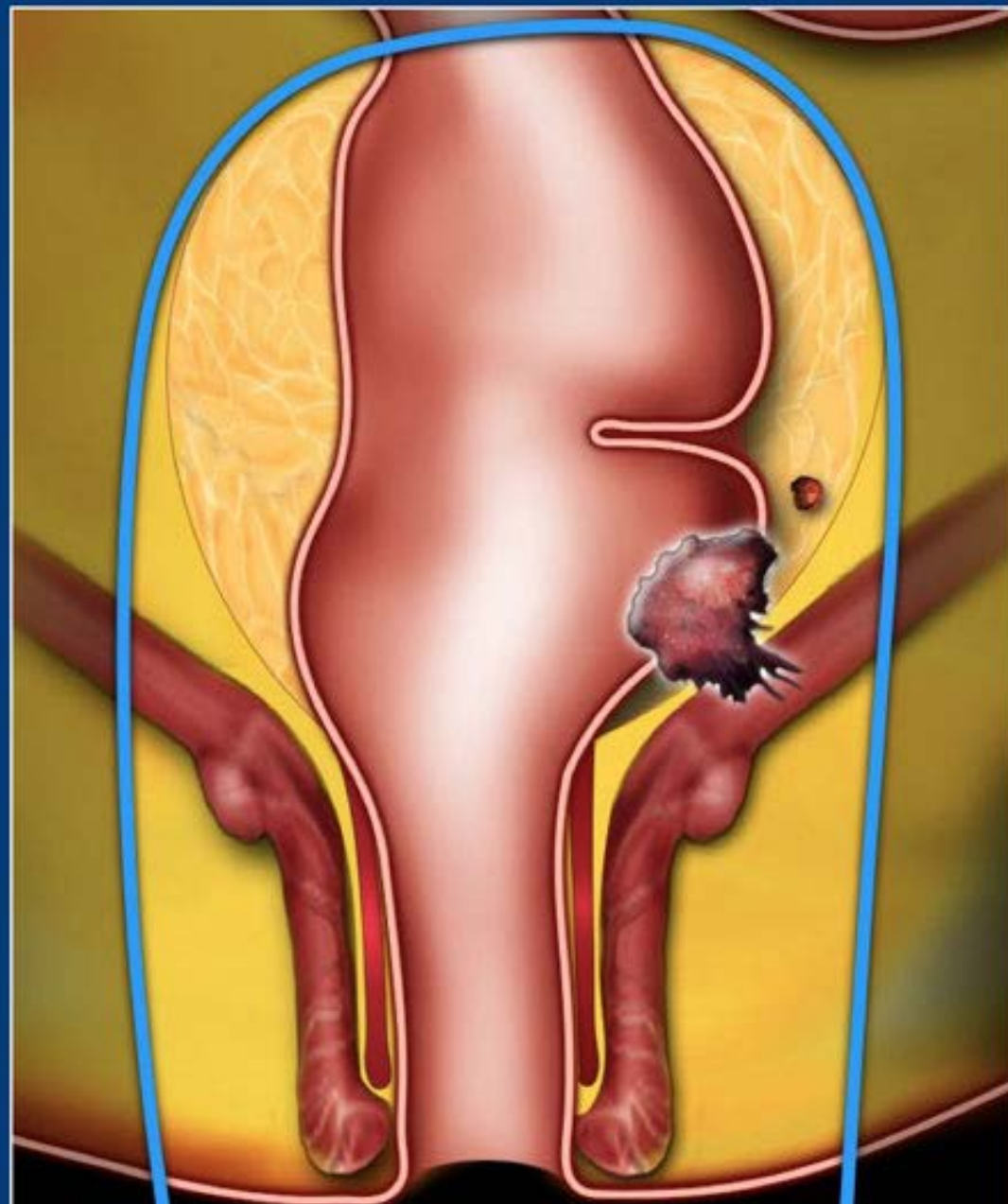
A BLACK HOLE

Beyond ELAPE...

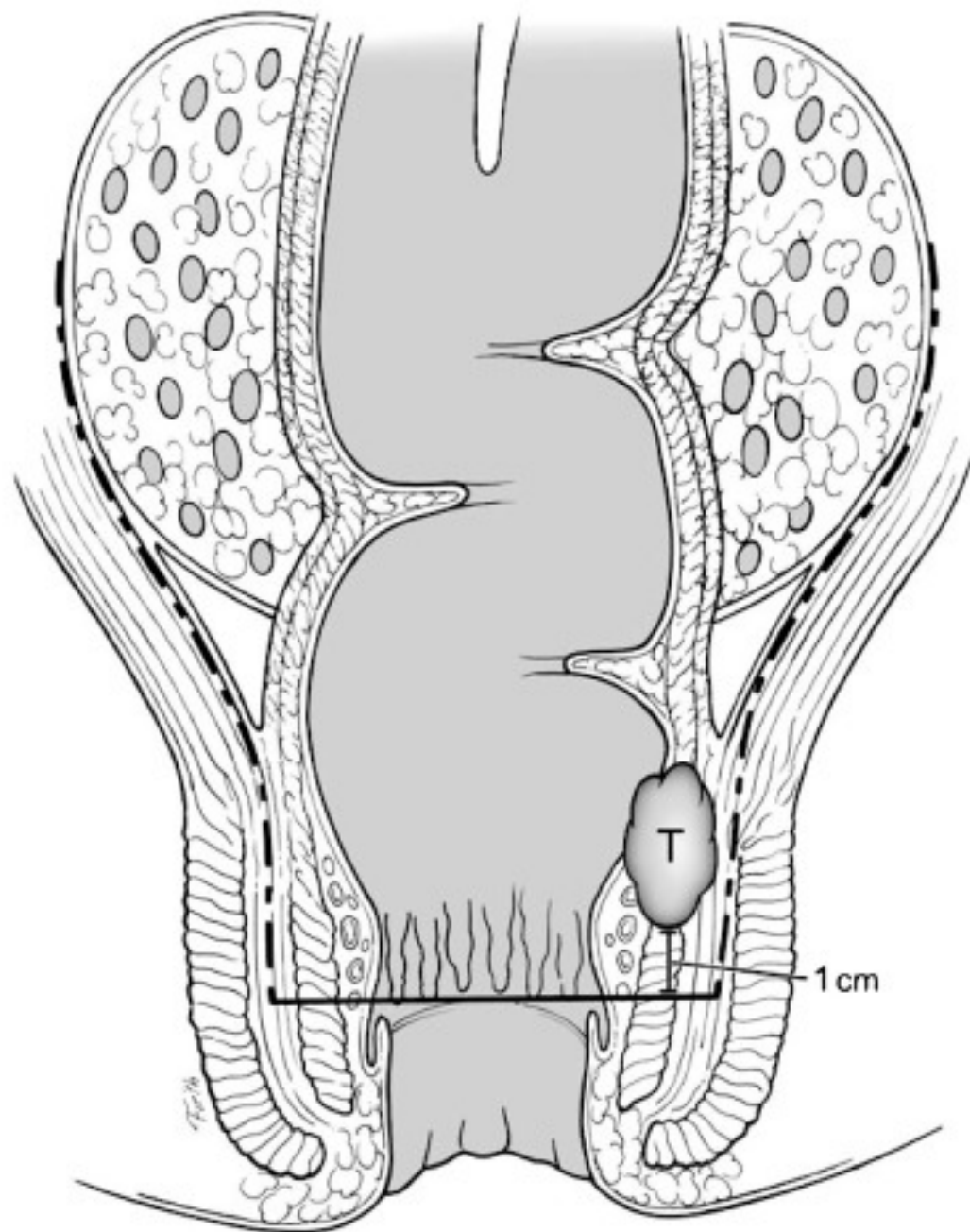
- Intersphincteric resection
- High intersphincteric resection
- Hemisphincteric resection

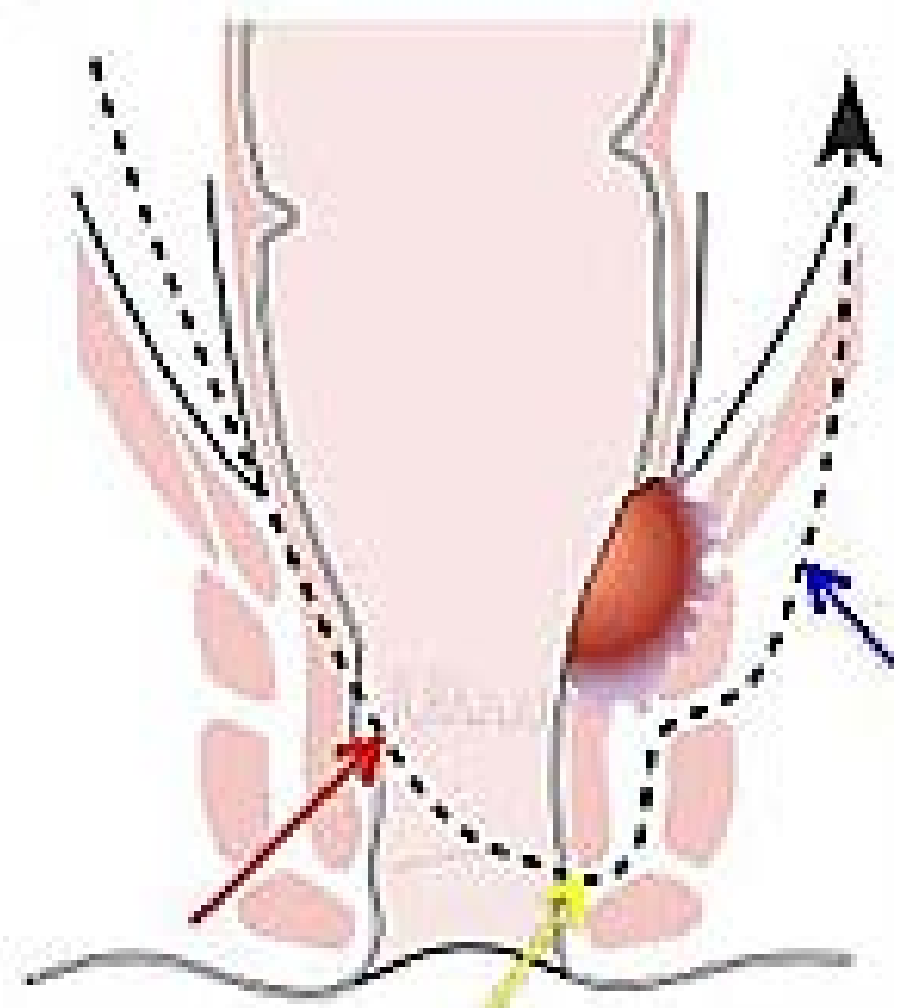
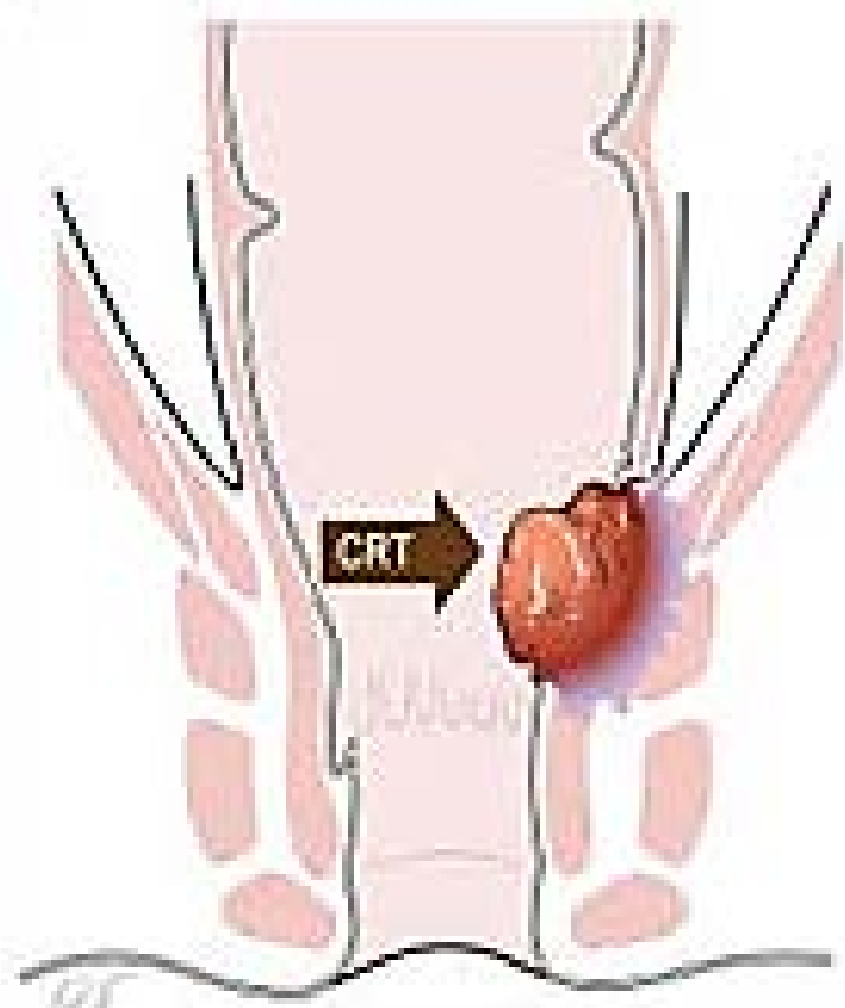


Intersphincteric **APE**

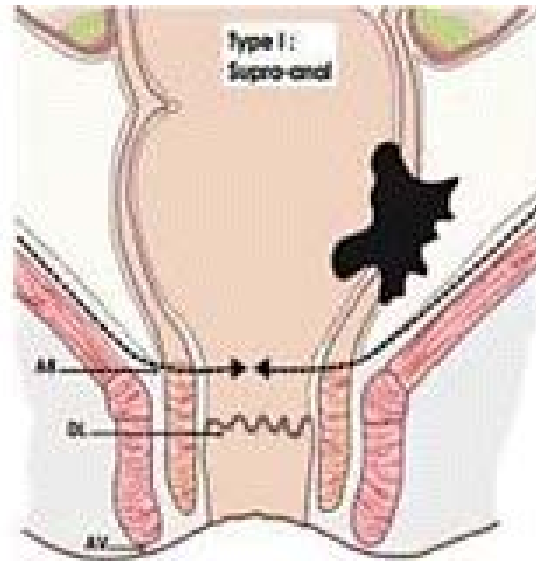


ELAPE

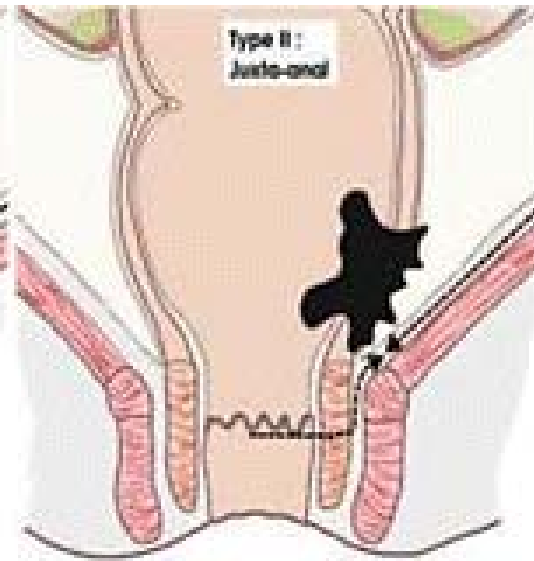




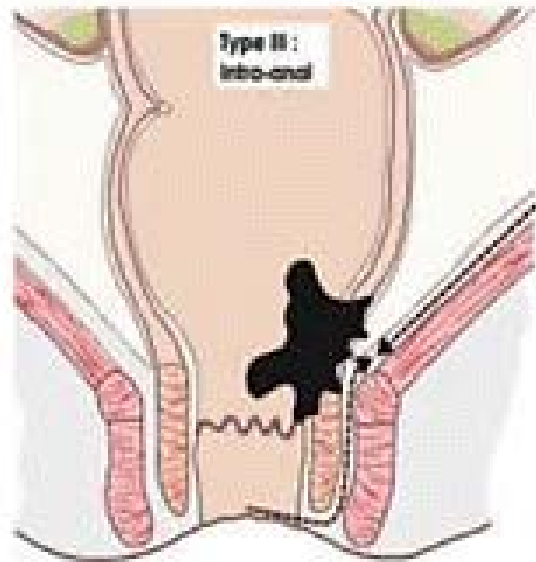
Type I
Supra anal tumor
(distal margin < 1-2 cm)
Colo-Anal Anastomosis



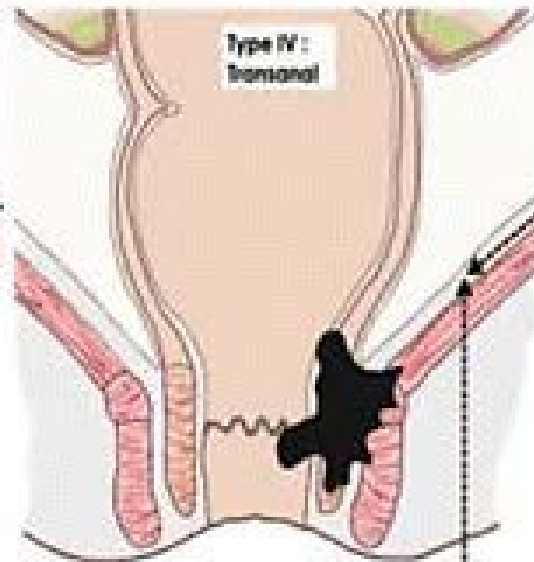
Type II
Juxta anal tumor
(distal margin = 0 cm)
Partial Intersphincteric Resection

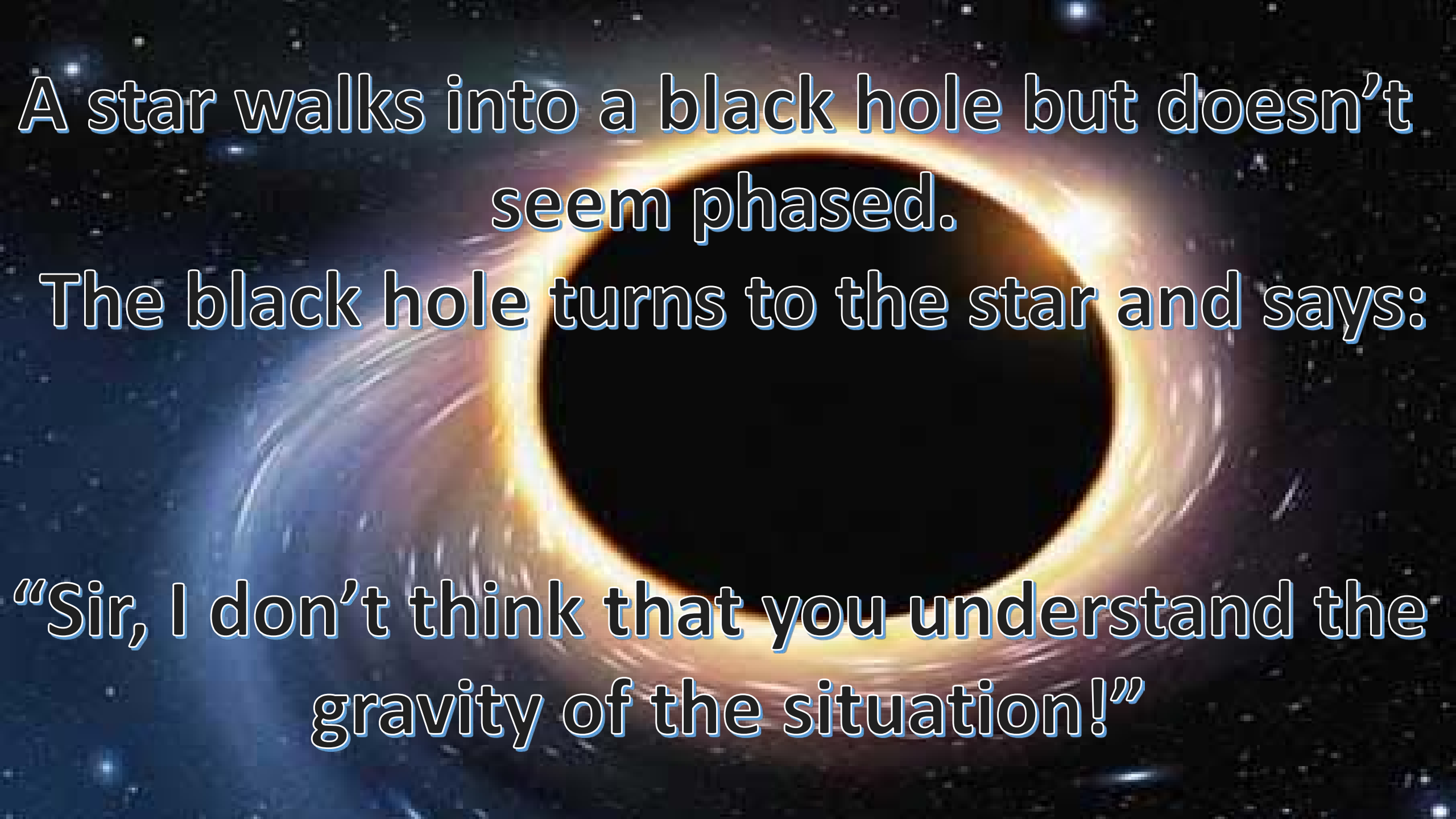


Type III
Intra anal tumor
(infiltration of the internal sphincter)
Total Intersphincteric Resection



Type IV
Trans anal tumor
(infiltration of the external sphincter)
Abdominoperineal Resection



A black hole with a glowing accretion disk against a starry background. The text is overlaid on the image.

A star walks into a black hole but doesn't
seem phased.

The black hole turns to the star and says:

“Sir, I don’t think that you understand the
gravity of the situation!”

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