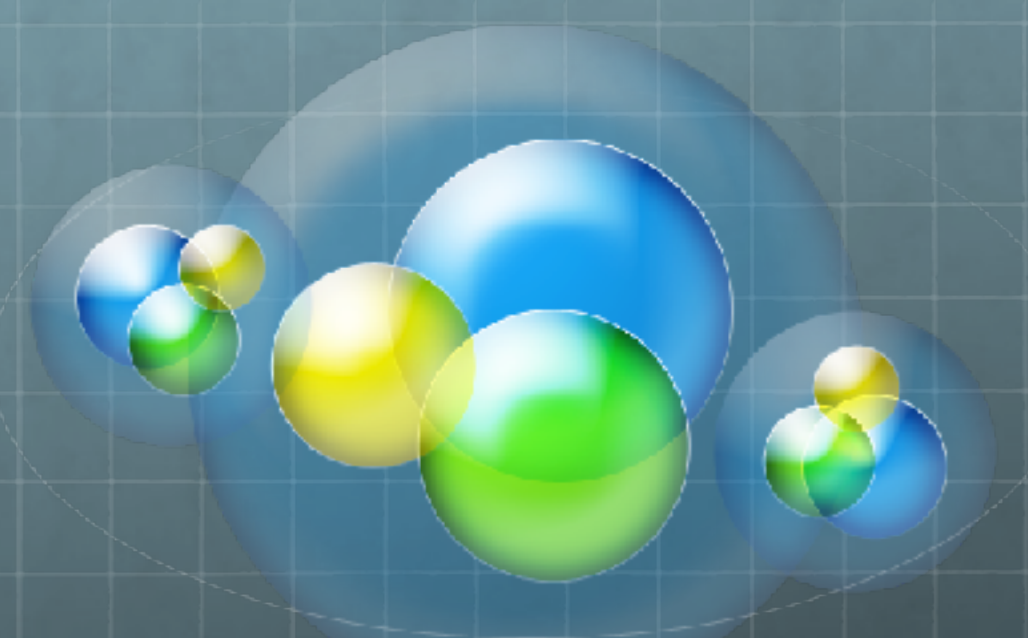


Treatment of anal fissure

strategy, reality facts and debates

I.H. Roman

Dr Ionel Horia ROMAN

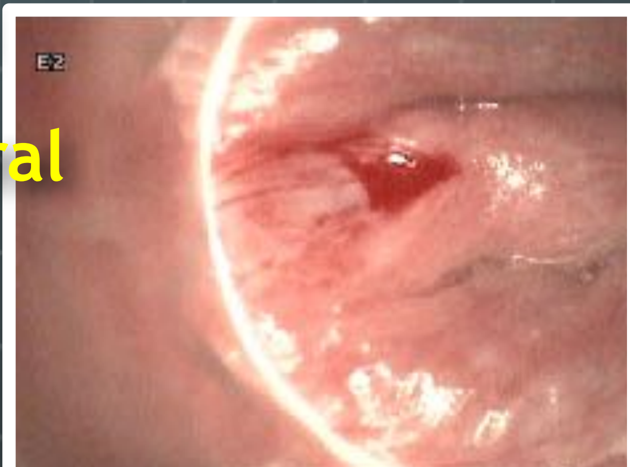
Anal fissure

Definition : anodermal, longitudinal, ulcerous deffect

Cause : multifactorial

Localisation : 80 % dorsal

20 % ventral



Status : acute / chronic

What is the

Mechanical factors - hard or soft stool

Inflammatory factors - local infection

Vascular factors - dorsal minor perfusion

Neuro-muscular factors - Hypertony

Mechanical lesion / microtrauma

Lost fixaxion of the anoderm

Anal pain

Internal sphincter hypertony

Increased resting pressure

Reduced blood perfusion

Local ischemia

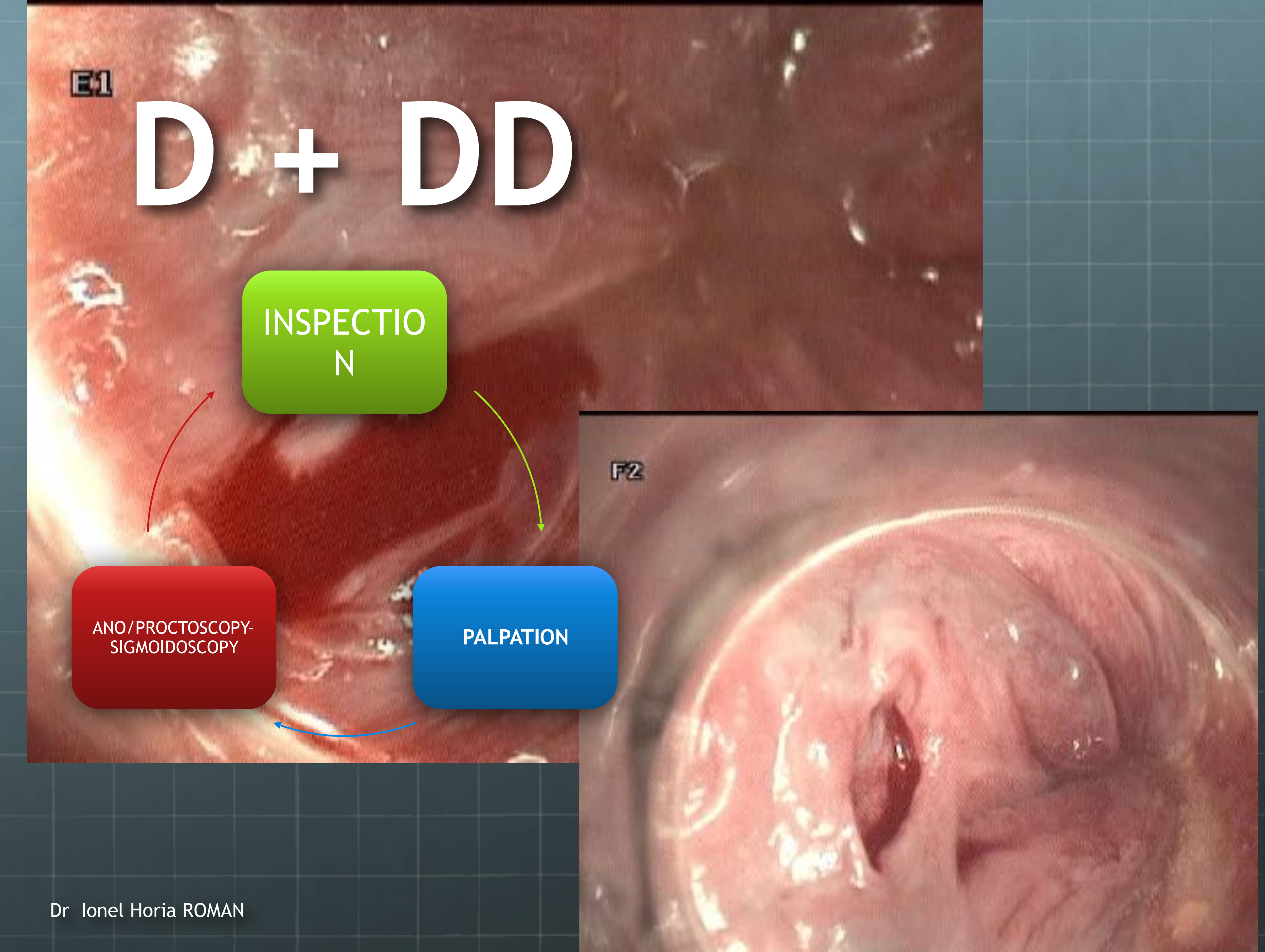
Chronification

Ischemic hypothesis of anal fissure

Spasm – blood perfusion of anoderm

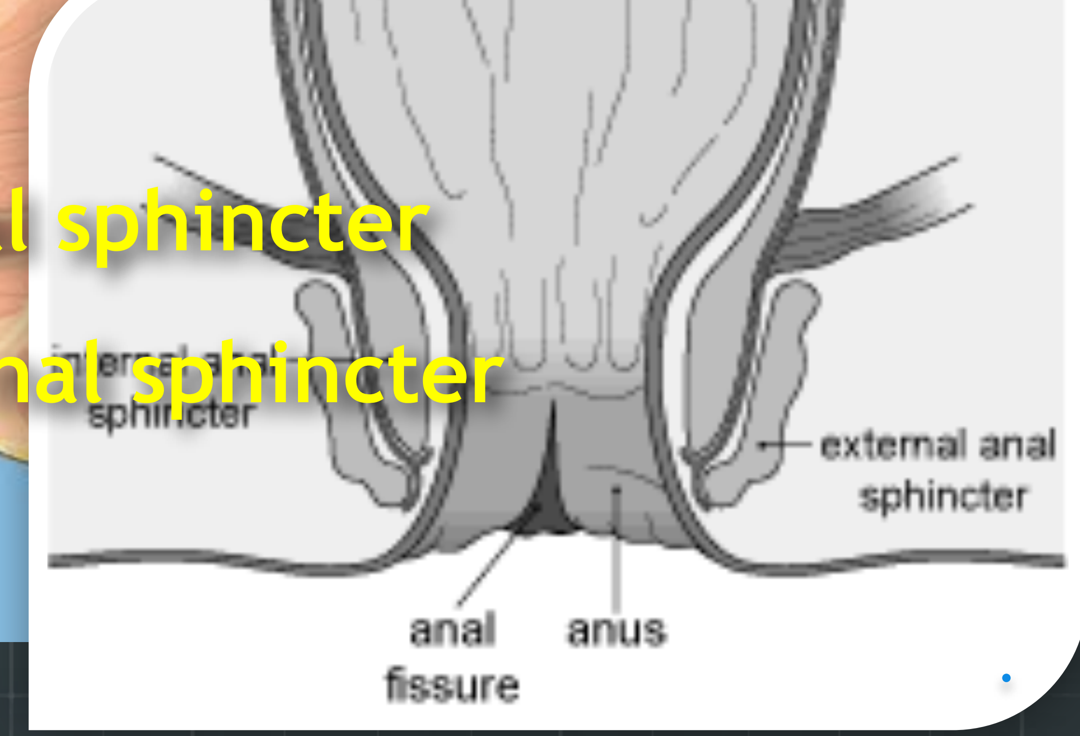
Relative paucity in blood vessel of the posterior commissure

Failure to heal results in chronicity


E1
D + DD
INSPECTIO
N
PALPATION
ANO/PROCTOSCOPY-
SIGMOIDOSCOPY
F2
Dr Ionel Horia ROMAN

Chronic Anal fissure

- 6-12 weeks
- Sentinel pile
- Hypertrophic anal papilla
- Scary edges
- Visible internal sphincter
- Slerosed internal sphincter



Anal fissure therapy

Medical Therapy?

- Glicerine trinitrate GTN
- Diltiazem
- Nifedipine
- BOTOX

Surgical / minimal invasive ?

- Anal dilation
- Posterior Sphincterotomy
- Lateral sphincterotomy
- Fissurectomy
- Fissurectomy & BOTOX
- ISLAND FLAP

Dr Ionel Horia ROMAN

MEDICAL TREATMENT OPTIONS REALITY ?

GTN – glyceril trinitrate

Rapidly absorbed transanodermally

GTN is a nitromonoxyd - NO donor

No is an inhibitoric neurotransmitter

NO causes non-adrenergic, non-cholinergic inhibition

Relaxation of smooth muscles

Increased blood perfusion

GTN results - open studies

- Healing rate 34 % - 77 %
- Duration of treatment 4-12 weeks
- Optimal concentration 0.2% - 0.4%
- 2-4 perianal application per day
- Low risk

- Inconsistent and small number of studies
- Insufficient follow-up
- Trials often inconclusive
- Lack strict criteria of chronicity and incontinence
- Heterogenous patient groups

MEDICAL TREATMENT OPTIONS REALITY ?

Ca Channel Blockers

- **Nifedipine**
- **Diltiazem**

  - no better or worse than GTN
  - same efficiency
  - no headache

MEDICAL TREATMENT OPTIONS   REALITY ?

BOTULINUM TOXIN
BOTOX

Sustained reduction in IAS tone

100 % compliance

Minimal side effects

Good healing

SECOND LINE TREATMENT after GTN failure or reoccurrence

Price

Dr Ionel Horia ROMAN

Surgical / mini-invasive treatment

SURGERY

ANAL DILATION	BALOON DILATION	POSTERIOR SPHINCTEROTOMY	LATERAL SPHINCTEROTOMY	FISSURECTOMY	ISLAND FLAP

Anal dilation

- 25 % incontinence rate
- Pneumatic baloon dilatation
- CIAD - controlled intermitent anal dilation - Park's retractor - gradual dilation up to 48 mm

15x20 sec cycles of anal dilation over 5 min

Posterior vs lateral sphincterotomy

- Lateral
- Quick release of anal pressure
- Continuous effect
- - fewer complications
  - Abscess
  - Delayed healing
  - Keyhole deformity
  - Gas and soiling incontinence

c

Lateral sphincterotomy but :

- Incontinence rate for flatus 0-36 %
- Soiling 0-21 %
- True incontinence 0-5 %

Incontinence not well defined in trials

- Flatus, mucus, stool ?
- Variable follow -ups
- Variable methods of assessment
- 5% - 45 %
- Incapacitating and permanent for a minority
- Benefits from a healed fissure outweigh minor disconforts of incontinence

FISSURECTOMY

- Removal of hypertrophied anal papilla and of the fibrous margins of the fissure without tampering with the internal sphincter
- Healing rates > 90 %
- No reoccurrences
- Best to be done with Elmann radiofrequency unit in an outpatient facility

4 MHz radiosurgery

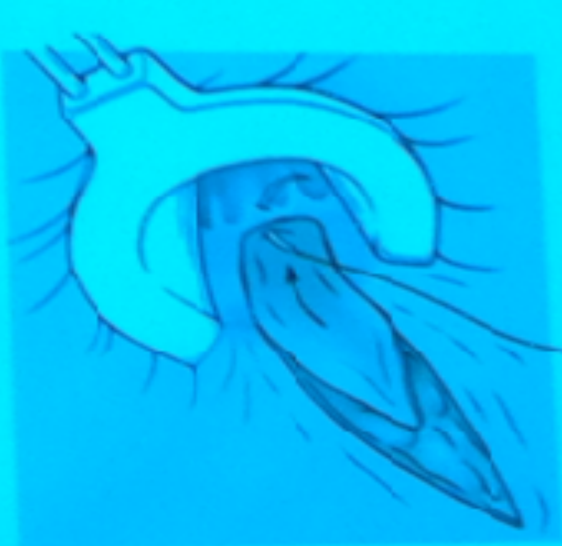
- Reliable and convenient alternative to laser technology
- Very precise
- Low temperature
- Fine scar
- Suitable for outpatient facilities

V-flap V-Y

eces de résistance'

spitäler schaffhausen

land-Flap: V-Y-Flap



Dr

Anal fissure treatment

Sphincterotomy downgraded - incontinence

Impact on quality of life ?

Just how good is medical therapy ?

Exhaust all medical options before surgery ?

Making sphincterotomy safer ?

Ambulatory fissurectomy ?

WHAT TO ADVISE PATIENTS ?

FIRST PRESENTATION - *primum non nocere*

Topical therapy GTN ,Ca blockers

initially - how far to go ? How many trials, one or more ?

- up to 40 % not satisfied
- Some patients with persistent recurrence over months of misery

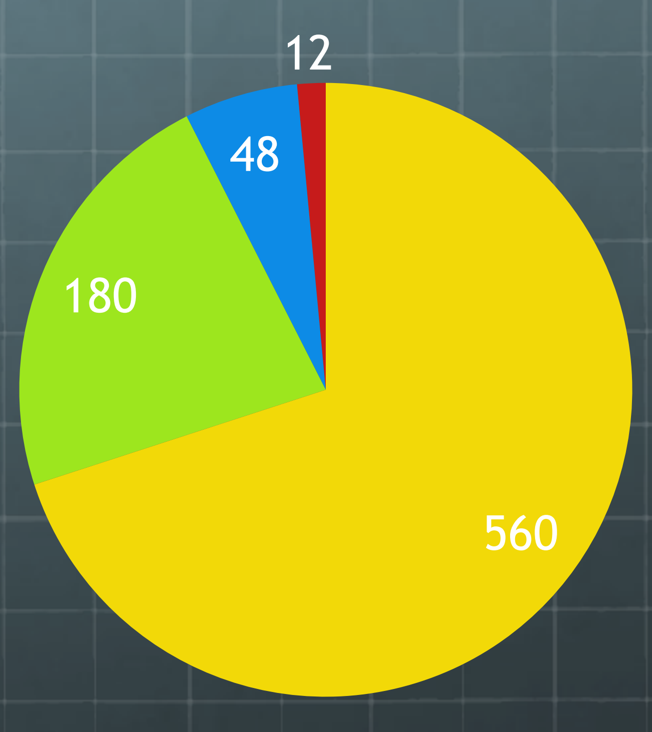
Early discussion over surgical procedures

FISSURECTOMY / FISSURECTOMY @BOTOX / LATERAL SPHINCTEROTOMY

Dr Ionel Horia ROMAN

Case study

- 800 patients with chronic anal fissure
- national outpatient coloproctology facility (LaurusMedical - Proctomed)



2010

topical
fissurectomy
lateral sphincterotomy
BOTOX

Dr Ionel Horia ROMAN

Case study

Topical treatment

n=560

- GTN 0,2-0,4 % , 2-4 applications/day, 3-6 weeks / trial
- Diltiazem 2 % , 3 applications/day
- healing rate of 50-70 %

NB : never used placebo ointment

Case study

BOTOX

- was used inconsistently   n=12
- after 1-3 trials of GTN or by express request
- Healing rate 49 %
- combined or not with fissurectomy

Case study

FISSURECTOMY

- most preferred n= 240
- performed EXCLUSIVELY ambulatory with local anestesia
- Indication- after 1-3 trials of topical treatment
- very easy -to-perform
- no pain, fine scar
- 90 % rate of success

Radiosurgery!

Case study

Surgery n=48

- performed at University Emergency Hospital Bucharest
- needed in only 6 % cases
- failure of conservative or miniinvasive treatment
- lateral and posterior sphincterotomy (surgeon biased)
- no case with advancement flap (still...)

patient approach ?

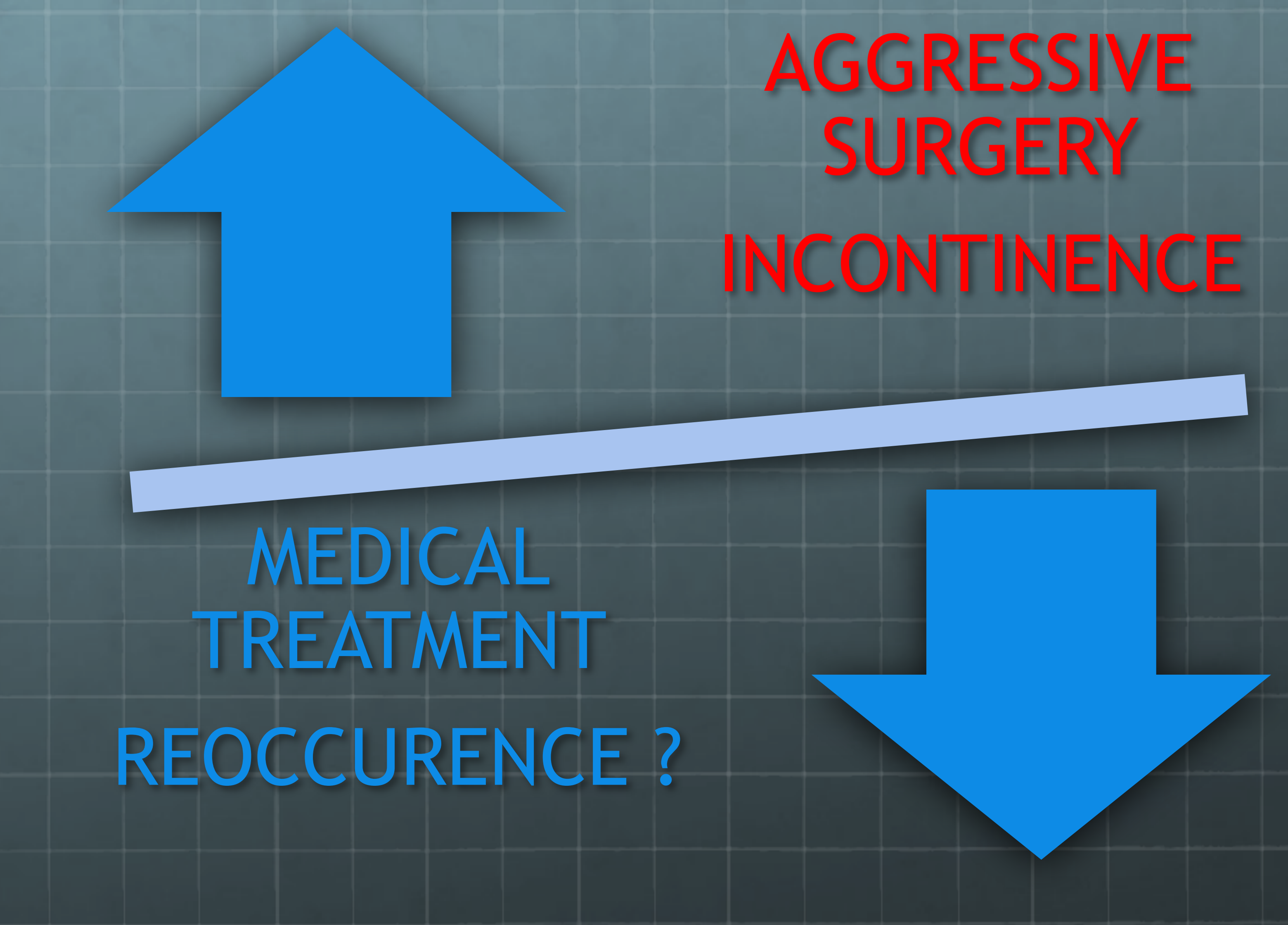
less agressive,

taking into account in the first place the topical treatment

In case of failure,the decision making for BOTOX or fissurectomy should be left to the patient

The patient has to bias the personal confort/ healing against the questionable risk of incontinence associated to invasive surgical procedures

Anal fissure therapy dilemma ?



Dr Ionel Horia ROMAN

UN GRAND MERCI