

American College of Surgeon Italian Chapter - SIRC

Aggiornamenti e ricerche clinico-sperimentali in Chirurgia

dell'Apparato Digerente , **Catania 17-18 settembre 2009**

THE OBSTRUCTED DEFECATION SINDROME

UNIVERSITA' DEGLI STUDI DI CATANIA

**Dipartimento di Scienze Chirurgiche, Trapianti d'Organo,
Tecnologie Avanzate**

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Obstructed Defecation Syndrome

DEFINITION

Difficult evacuation for functional or anatomical alteration of rectoanal and pelvic floor district

Obstructed Defecation Syndrome



Constipation

ROMA II criteria

Constipation: if the patient that don't take laxatives complains almost two of these symptoms during 12 weeks in the last year:

- Less than three defecations /week
- Hard stools in more than 25% of defecations
- Sense of not having emptied the anal canal in more than 25% of defecations
- Straining in more than 25% of defecation
- Manual manipulation during defecation

Obstructed Defecation Syndrome



CAUSES of CONSTIPATION

A) Functional /motility disorders

- Irritable bowel syndrome**
- Slow transit constipation**
- Disorders of of pelvic floor and/of anal sphincters
(anismus, dissynergy , paradoxical puborectalis contraction)**

Obstructed defecation syndrome



CAUSES of CONSTIPATION

B) Mechanical /pelvic floor disorders

- Anatomical obstruction of the colon rectum and of the anal canal for Cancer , Crohn's disease, Radioteraphy, Iatrogenic causes.

-Obstructed defecation :

a)Rectal : Rettocele ; internal mucosal prolapse ; intussusception .

b) No rectal : Enteroccele/ sigmoidoccele; urogenital prolapse .

Obstructed defecation Syndrome



CAUSES OF O.D.S.

A) Mechanical obstruction by anatomic causes:

- **Redundancy of the lower rectum : -internal mucosal prolapse**

- rectoanal intussusception

- rectocele



Pelvic prolapses :

- enterocele

- sigmoidocele

- urogenital prolapse

B) Functional Disorders:

- pelvic dyssinergia - paradoxical

Obstructed Defecation Syndrome



Causes of O.D.S. 2

A) Obstructed defecation of mechanical – structural type:

- Redundancy of the lower rectum
 - internal mucosal prolapse
 - rettoanal intussusception
- Pelvic prolapses
 - enterocele
 - sigmoidocele
 - urogenitale prolapse

B) Obstructed defecation by power vector dispersion:

- rectocele

C) Functional disorders:

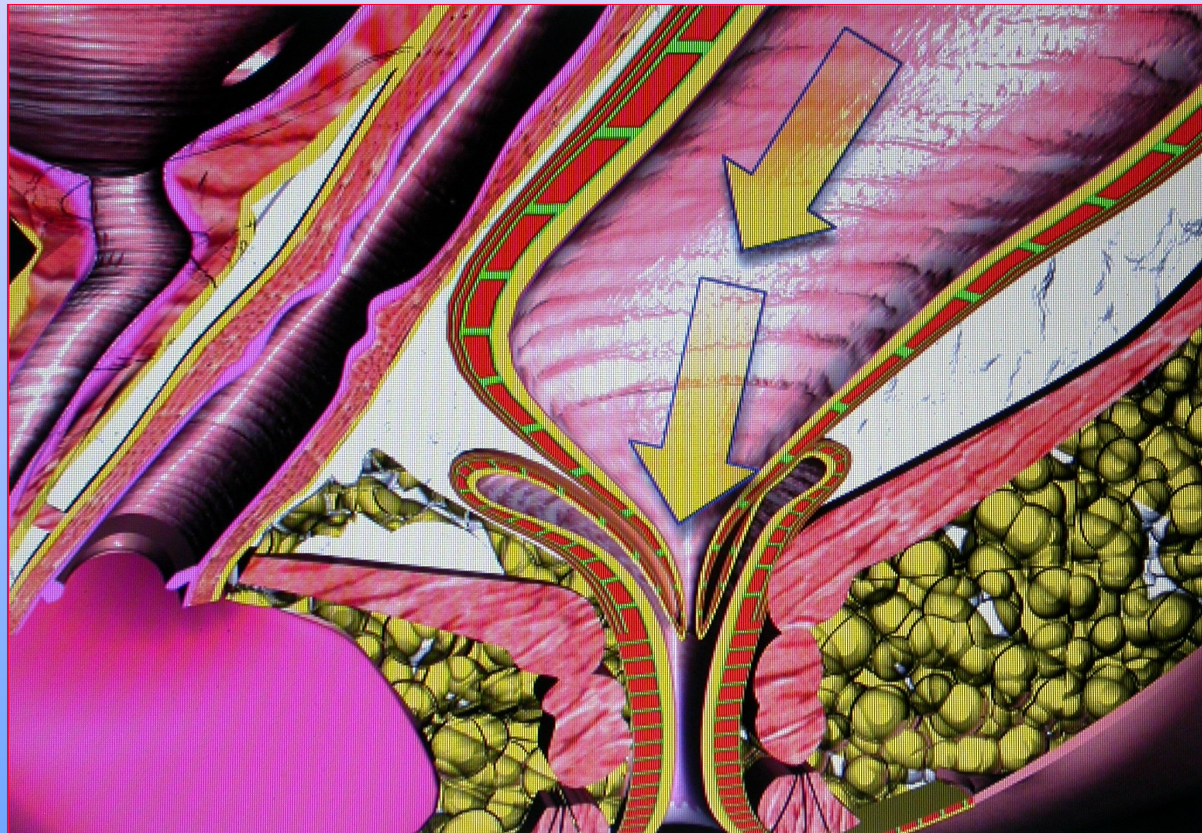
- pelvic dyssinergia – paradoxical c.p.r.

D) Obstructed defecation by lower sensibility to rectal distension

Obstructed Defecation Syndrome



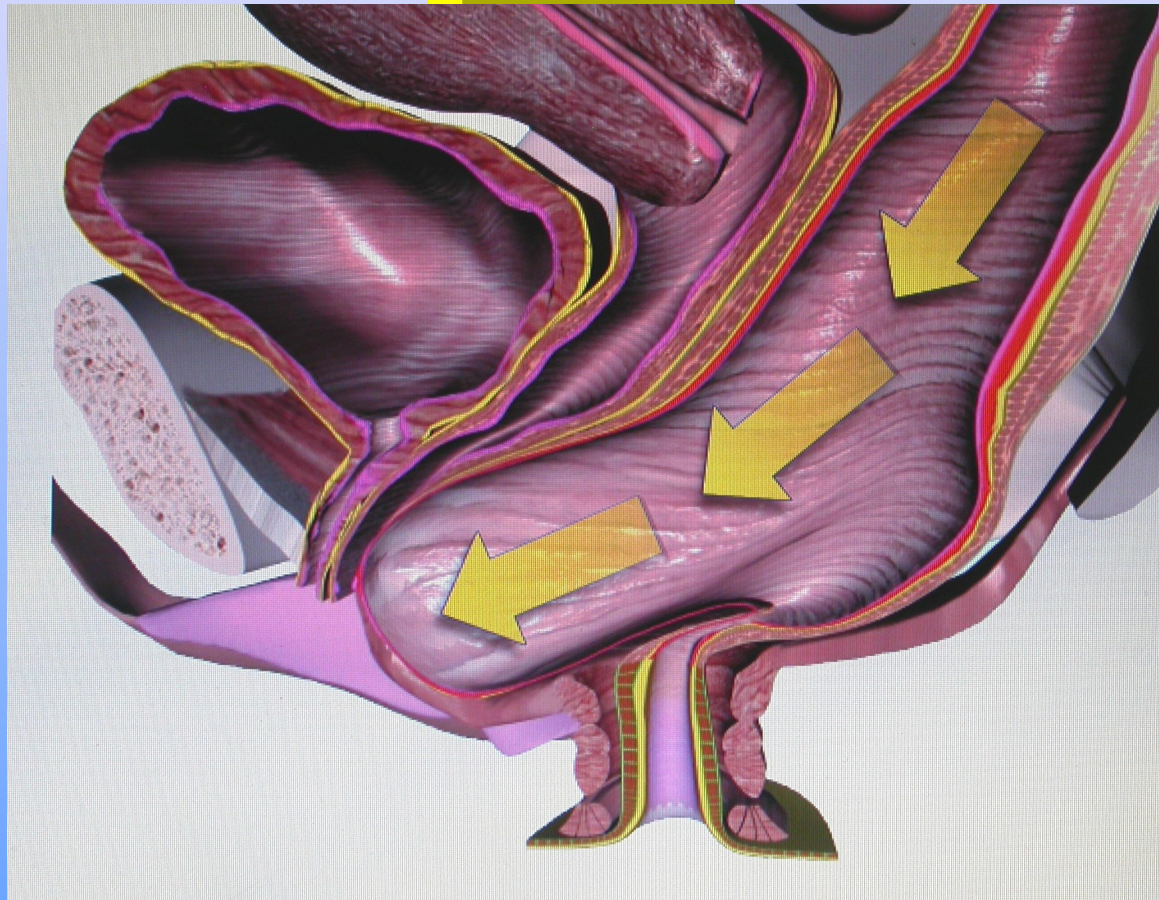
Internal mucosal prolapse /Intussusception



Obstructed Defecation Syndrome



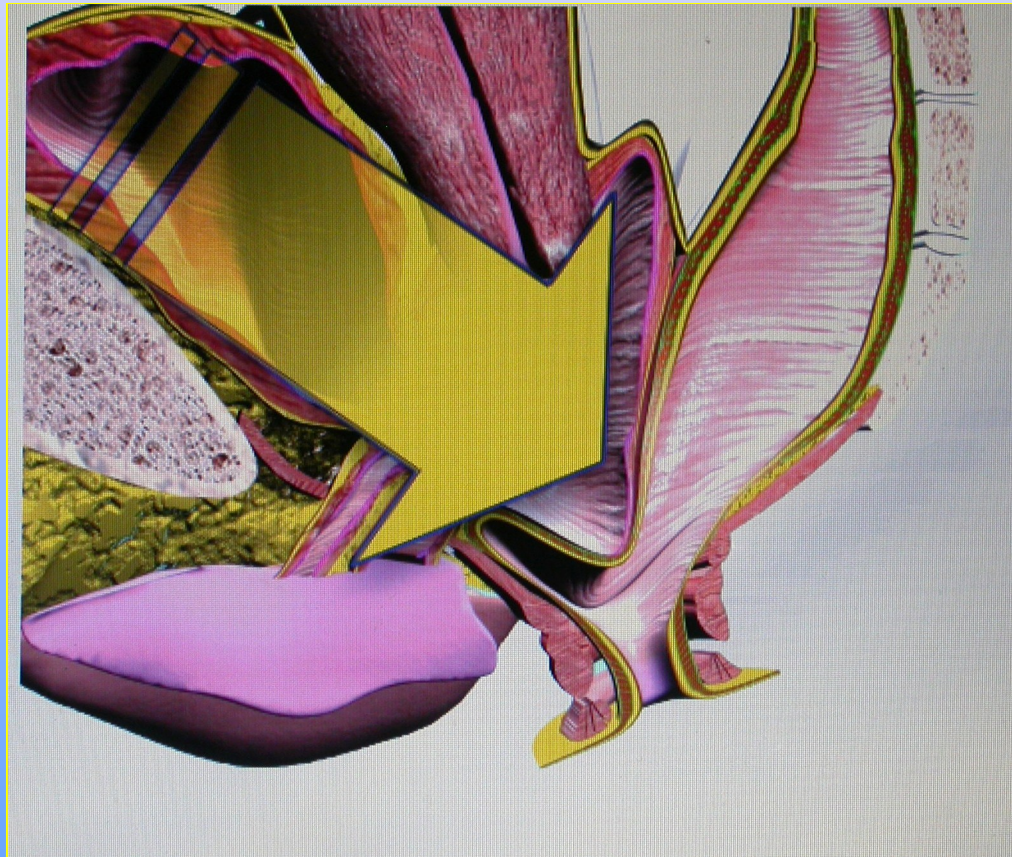
Rectocele



Obstructed Defecation Syndrome



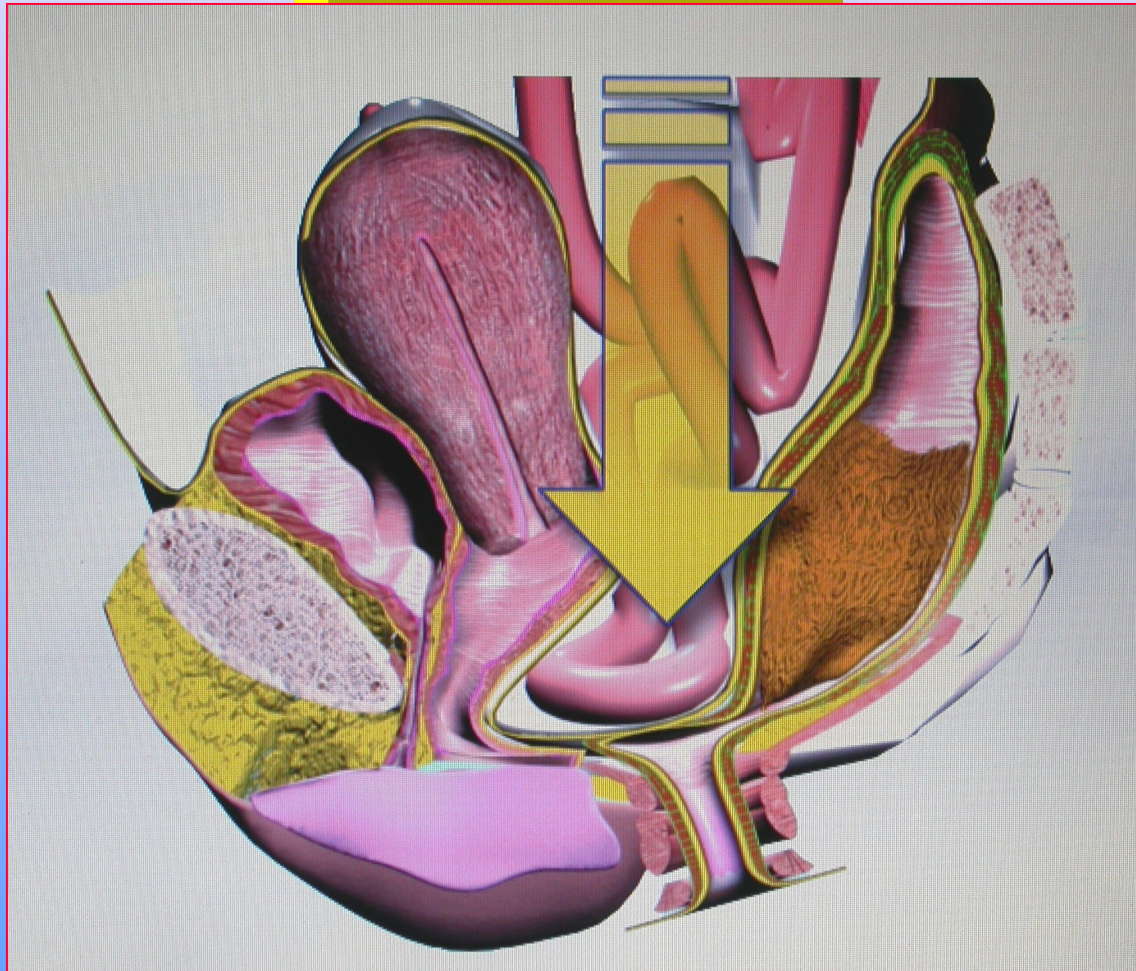
Genital prolapse



Obstructed Defecation Syndrome



Entero-sigmoidocele



Obstructed Defecation Syndrome



Diagnostic Algorithm

Before clinical examination

- Colonscopy to exclude mechanical obstruction (cancer) or inflammatory bowel diseases (IBD)
- Evaluation of hygienic- dietetic treatment (fiber /enemas /laxatives/probiotics/prebiotics)



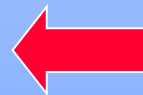
During clinical examination

- Anamnesis /clinical history
- Scores ODS
- Scores Incontinence
- Scores PAC/QoL



Clinical examination

- Perineo-anal inspection
- Digital anorectal exploration
- Anoproctoscopy
- Urogenital examination



Strumental examination

- Enterocolpodefecography
- Dynamic defecography with magnetic resonance
- Endoanal echography
- Manometry
- Elettromiography
- Intestinal transit
- Perineometry
- Others: Psychological test.

Obstructed Defecation Syndrome



✦ Enterocolpodefecography

-Prolasso mucoso interno /intussuscezione



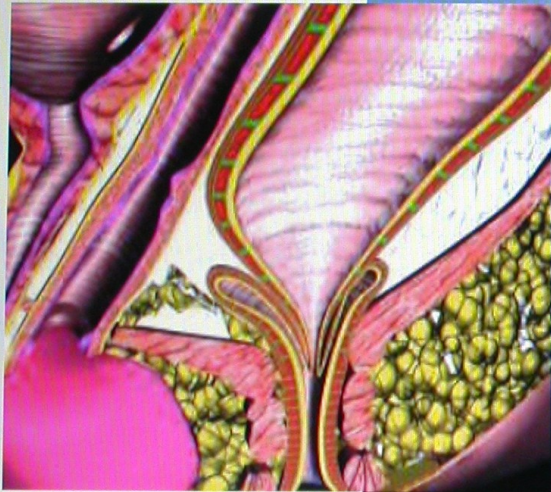
Image at rest

Obstructed Defecation Syndrome



✦ Enterocolpodefecography

- Internal mucosal prolapse /intussusception



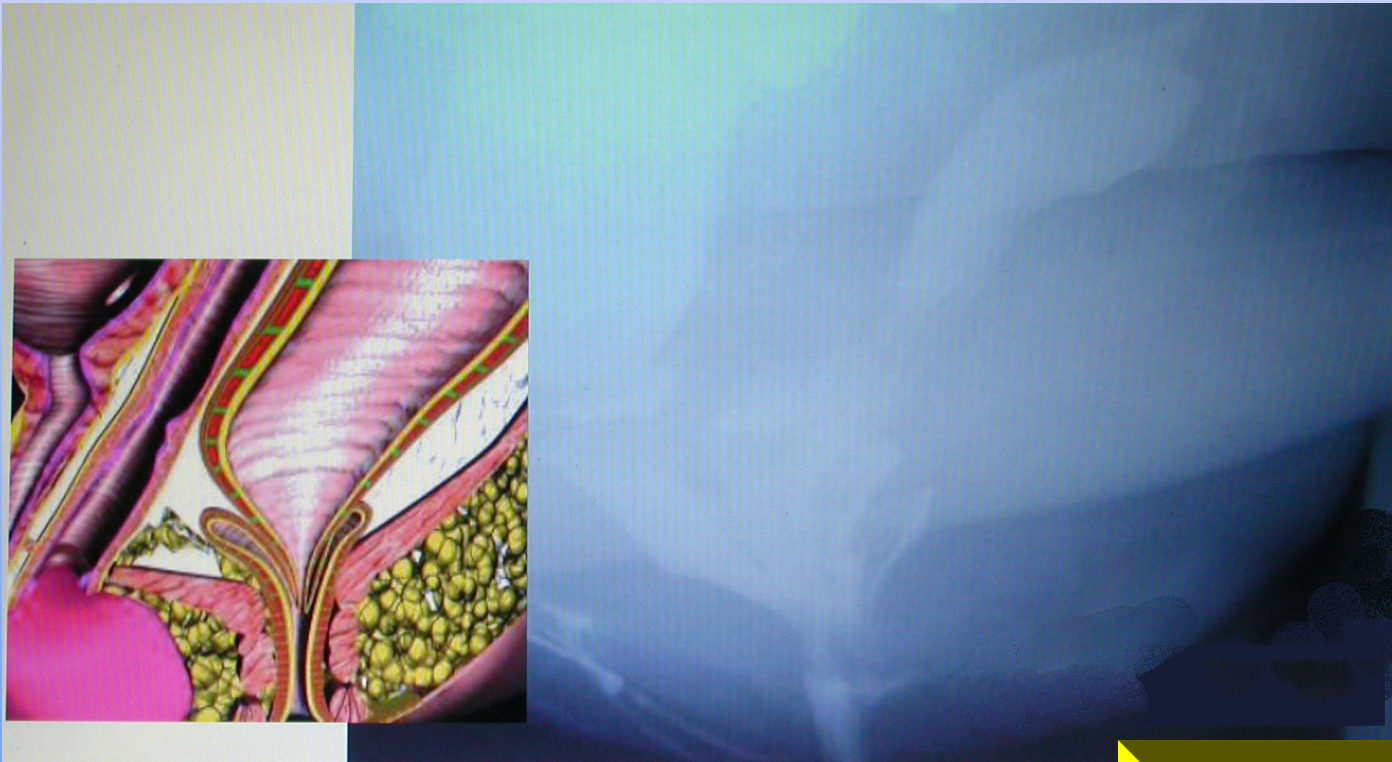
straining 1

Obstructed Defecation Syndrome



✦ Enterocolpodefecography

-Internal mucosal prolapse /intussusception



Straining 2

La Sindrome da Defecazione Ostruita



✦ Enterocolpodefecography

-Rectocele + internal mucosal prolapse

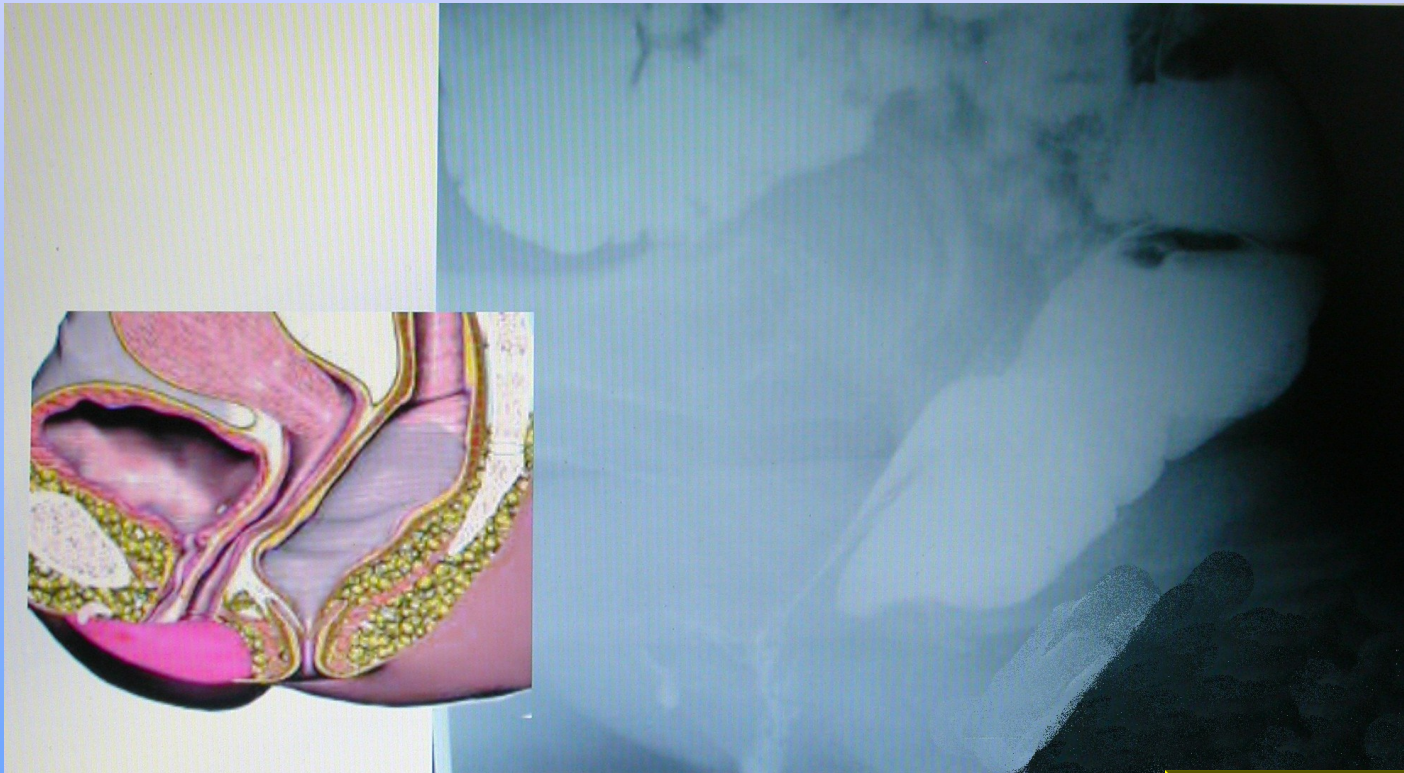


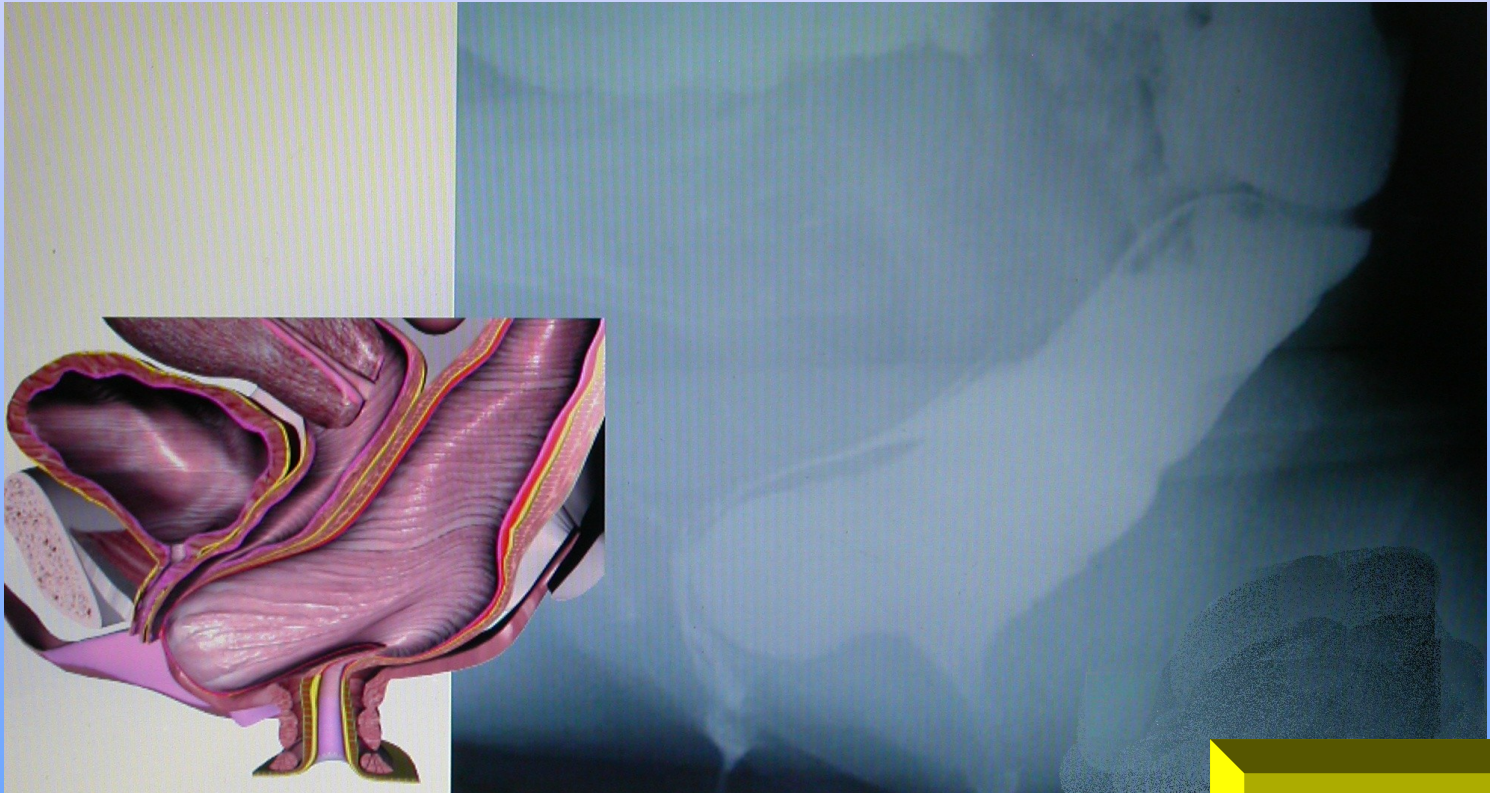
Image at rest

Obstructed Defecation Syndrome



✦ Enterocolpodefecography

-Rectocele + internal mucosal prolapse



Straining

Obstructed Defecation Syndrome



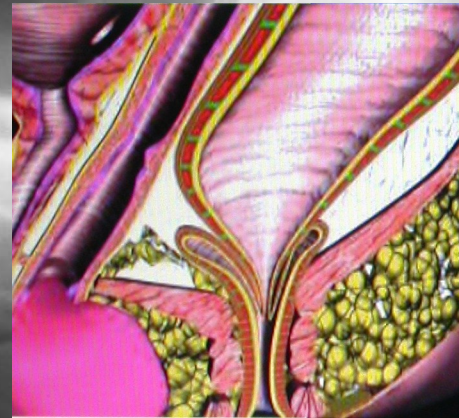
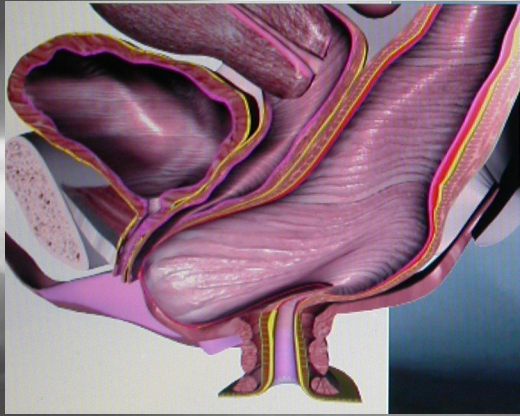
✦ Enterocolpodefecography

-Enteroceles and sigmoidoceles

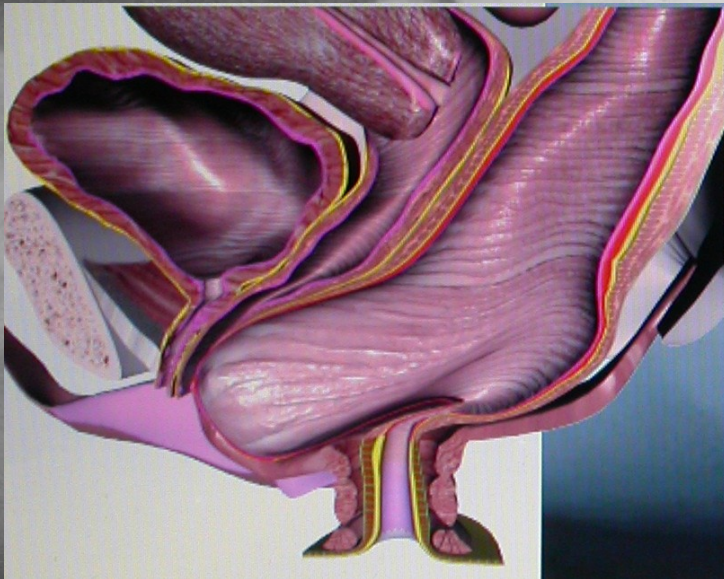


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**Internal mucosal prolapse / rectoanal intussusception/
rectocele**



Rectocele - Descending perineo



Paradoxical contraction of pubo-rectalis m.

Obstructed Defecation Syndrome



SYMPTOMS

- **Prolonged straining at defecation**
- **Pain at defecation**
- **Prolonged time at toilet**
- **Perineal pain /discomfort at standing**
- **Feel of incomplete evacuation**
- **Urgency**
- **Fragmented defecation**
- **Manual vaginal,perineal or rectal manipulation**
- **Abuse of laxatives and/or enemas**

Obstructed Defecation Syndrome



Evaluation of **hidden** signs and symptoms in O.D.S.

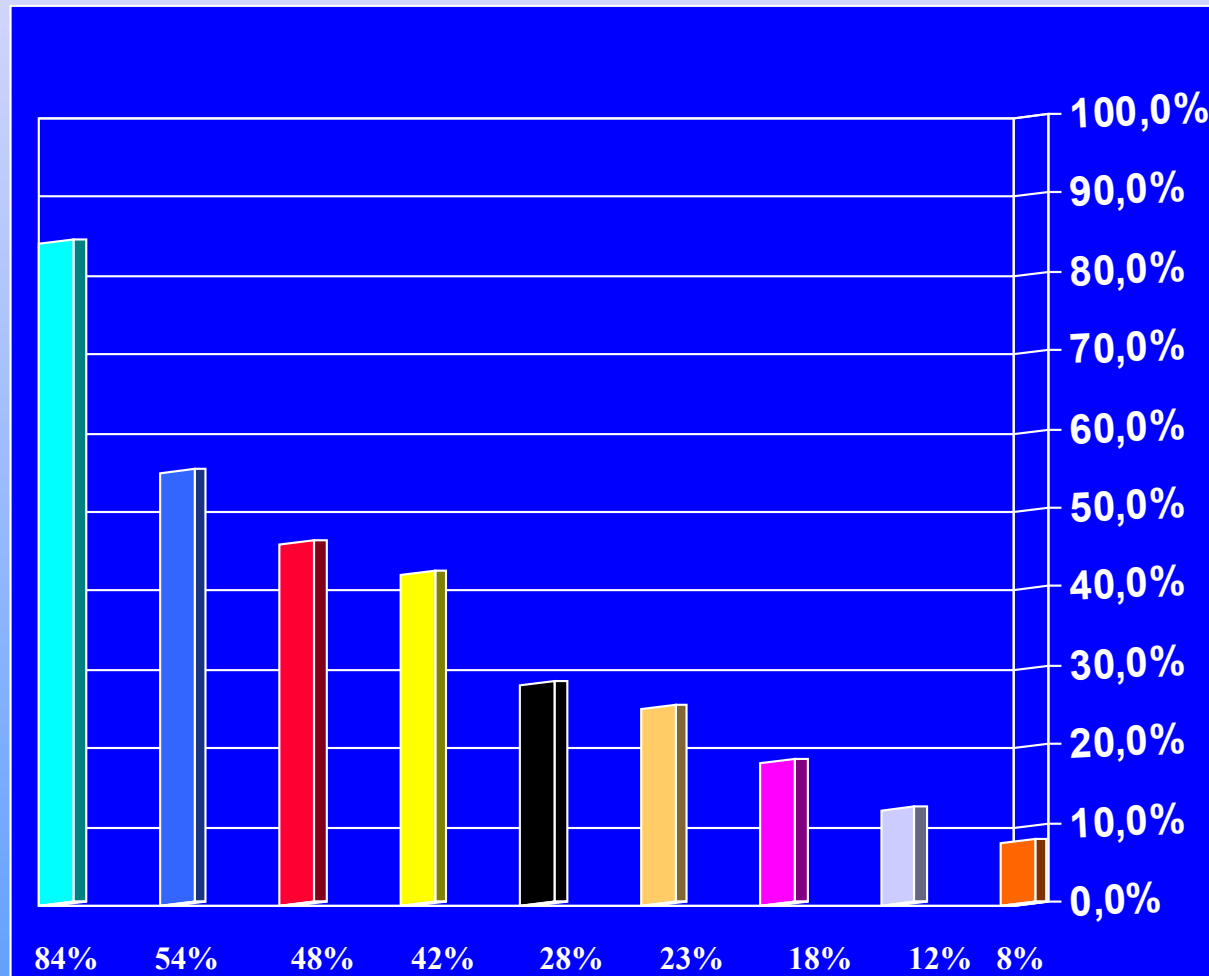


The Iceberg Diagram

Obstructed Defecation Syndrome



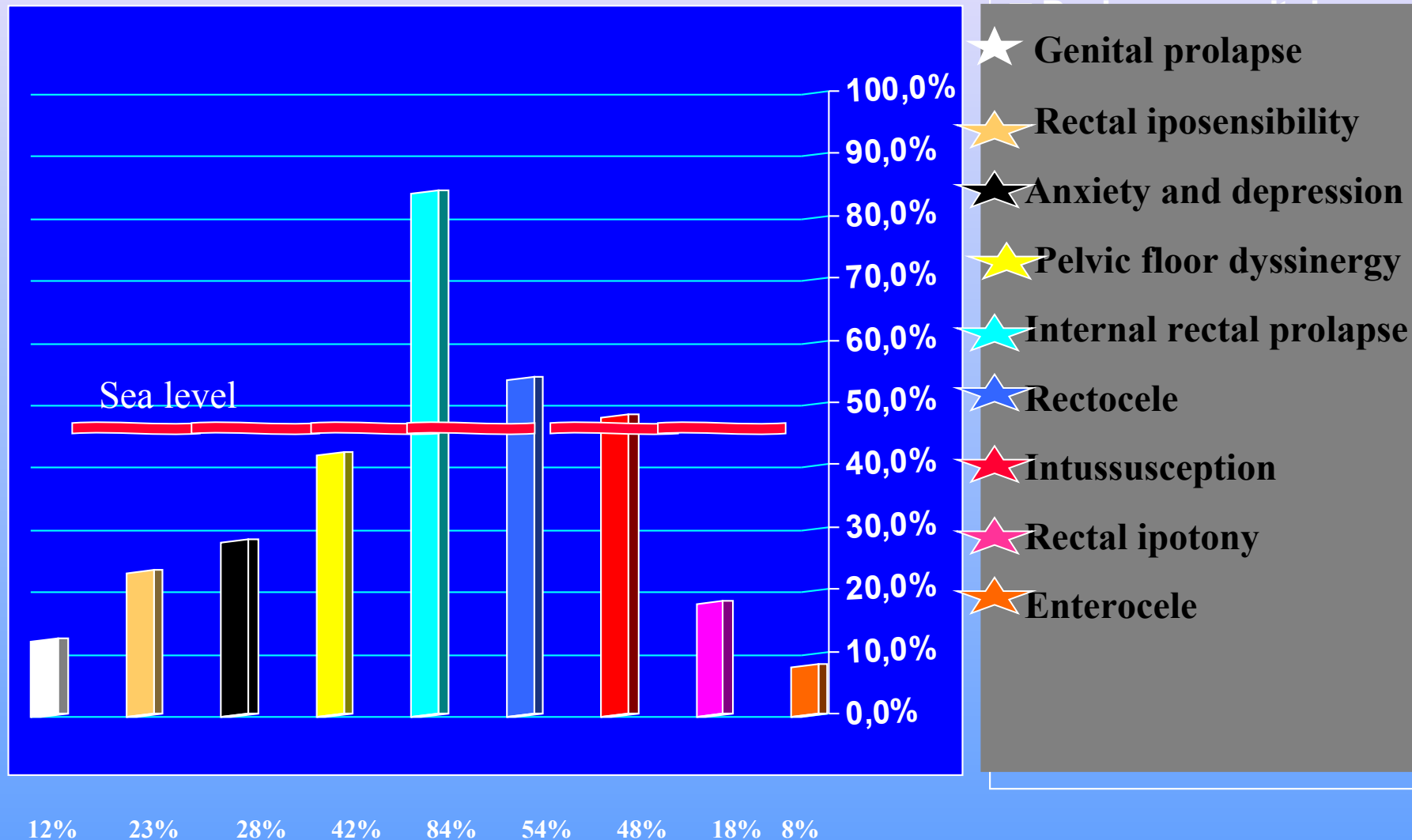
Signs and Symptoms of the personal patients



- ★ Internal mucosal prolapse
- ★ Rectocele
- ★ Intussusception
- ★ Pelvic floor dyssinergia
- ★ Anxiety and depression
- ★ Rectal iposensibility
- ★ Rectal ipotony
- ★ Genital prolapse
- ★ Enterocele

Obstructed Defecation Syndrome

Iceberg diagram in the personal patients



Obstructed Defecation Syndrome



**TREATMENT CRITERIA OF ODS PATIENTS
AFTER DIAGNOSTIC CLINICAL AND
INSTRUMENTAL EVALUATION**

Obstructed Defecation Syndrome



TREATMENT CRITERIA

**Internal rectal prolapse
+/- rectocele without
associated anatomical
disorders**



S.T.A.R.R.

Obstructed Defecation Syndrome



TREATMENT CRITERIA

**Internal rectal prolapse
+/- rectocele with associated
anatomical disorders:**

- Enteroceles
- Sigmoidoceles
- Urogenital prolapse
- External rectal prolapse



**Treatment of
associated disorders**



**New check up of ODS
and, if symptoms persist**



S.T.A.R.R.

Obstructed Defecation Syndrome



TREATMENT CRITERIA

**Internal prolapse +/-
rectocele and**

Pelvic dyssinergia

or

Rectal iposensibility



Biofeed-back



**New check up of ODS
and, if symptoms persist**



S.T.A.R.R.

Obstructed Defecation Syndrome



TREATMENT CRITERIA

**Internal rectal prolapse +/-
rectocele with fecal incontinence**

**With sphincteric
defect**

**Without
sphincteric
defect**

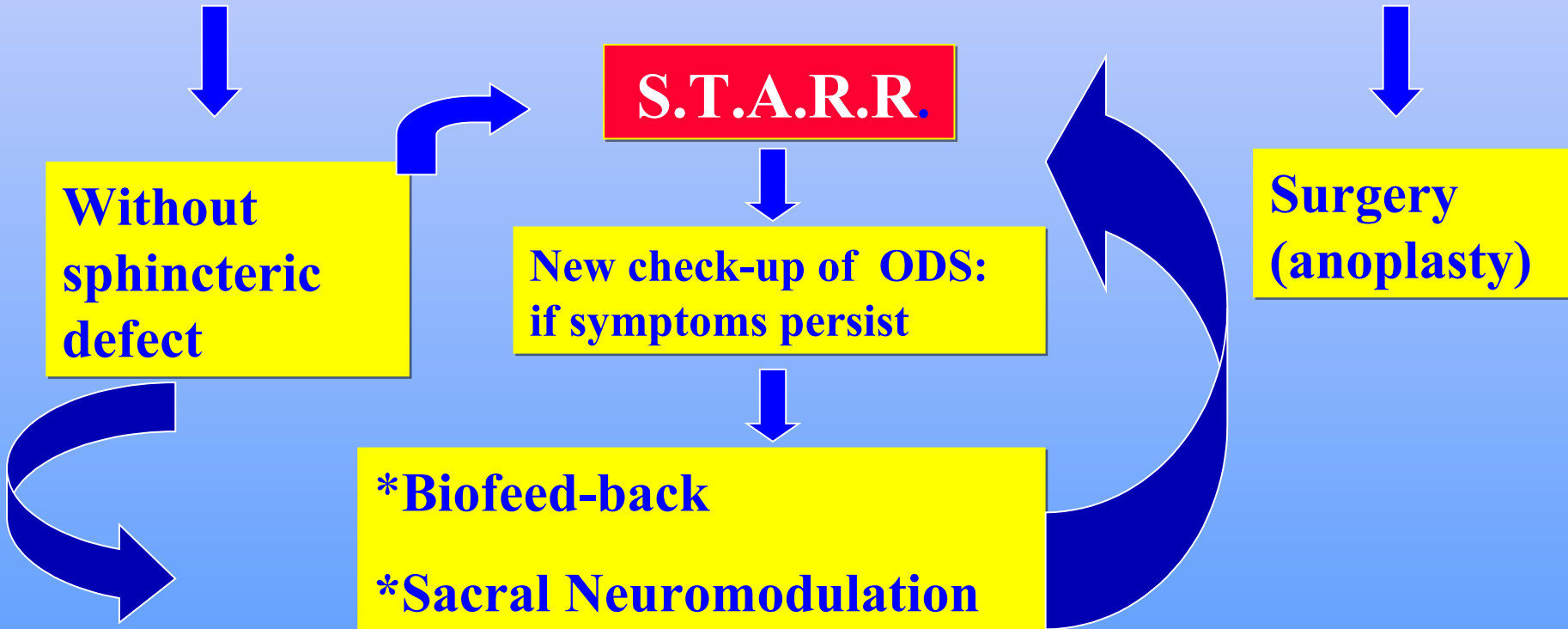
S.T.A.R.R.

**New check-up of ODS:
if symptoms persist**

**Surgery
(anoplasty)**

***Biofeed-back**

***Sacral Neuromodulation**



Obstructed Defecation Syndrome

S.T.A.R.R.



A) Inclusion criteria : (absolute yes)

-Only anatomical documented obstruction: internal mucosal prolapse / recto-anal intussusception/ Rectocele evident by defecography (morphological evaluation) + ODS score (clinical evaluation)

B) Absolute exclusion criteria: (absolute no)

- Evident psychiatric disorders
- Organic sphincteric deficit > 30% evident by ecography and manometry

C) Relative exclusion criteria: (no better than yes)

Puborectalis dyssinergia : possible inclusion after biofeedback o NMS
- Enterocoele or sigmoidocoele or urogenital prolapse: inclusion if it is possible the treatament of associated disorders or under laparoscopiv view
- Functional deficit of anal sphincter : possible STARR after biofeedback or NMS

Rectal ipocynesia and iposensibility : possible inclusion after biofeedback or NMS



ODS TREATMENT

NEWS TECHNIQUES

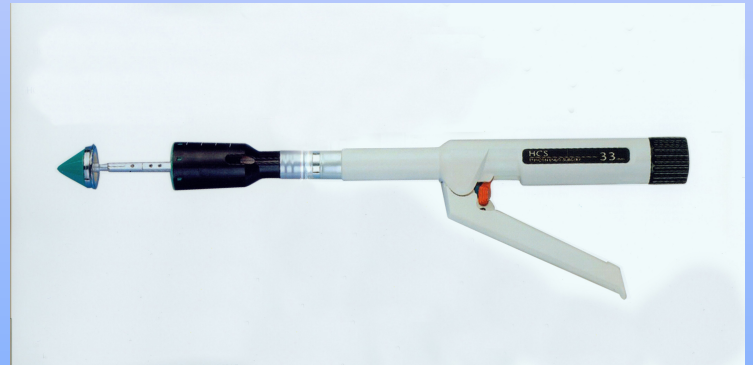
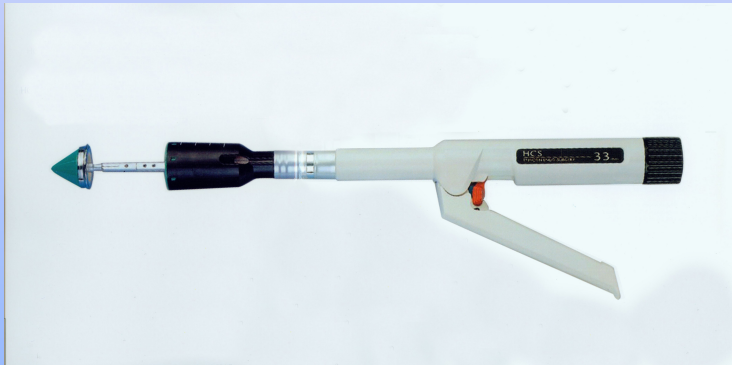
STARR by PARACHUTE TECHNIQUE

CONTOUR TRANSTARR



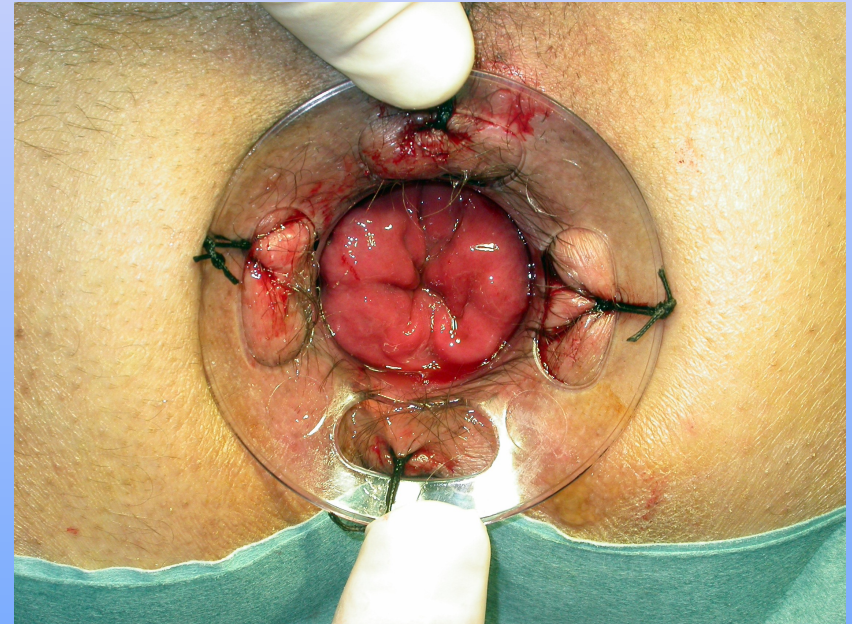
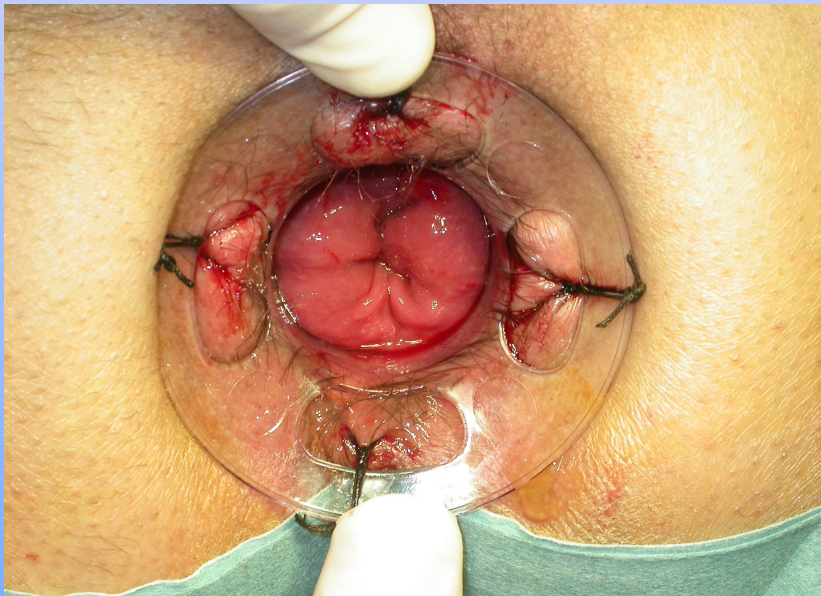
ODS TREATMENT

STARR by PARACHUTE TECNIQUE



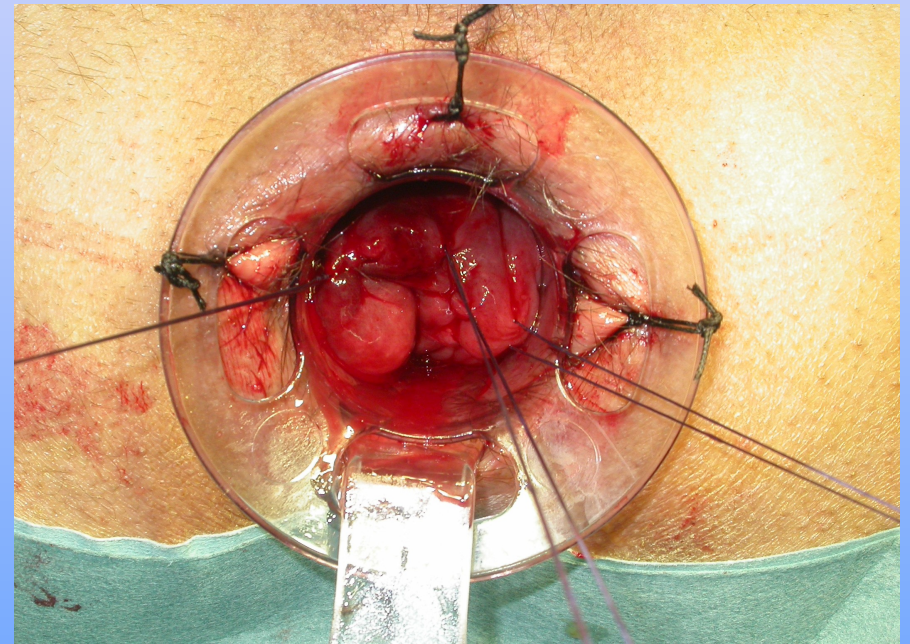
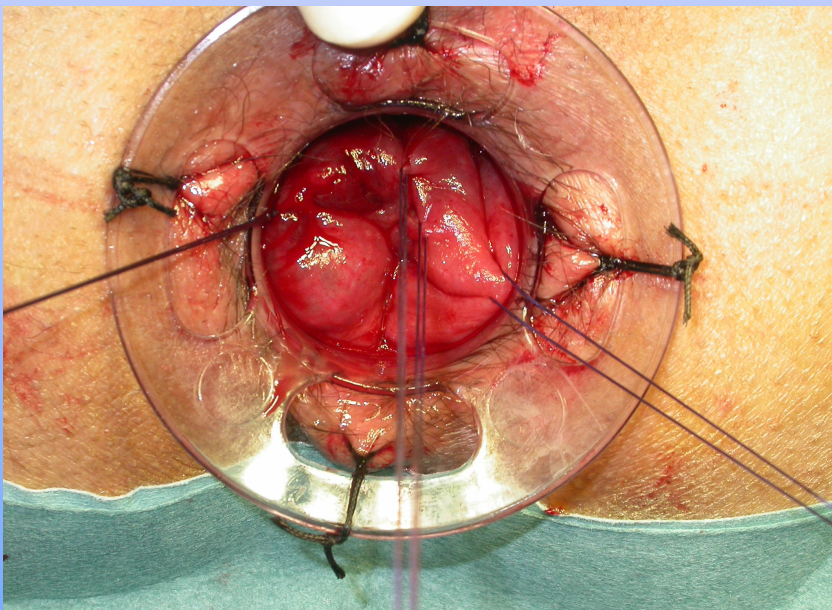
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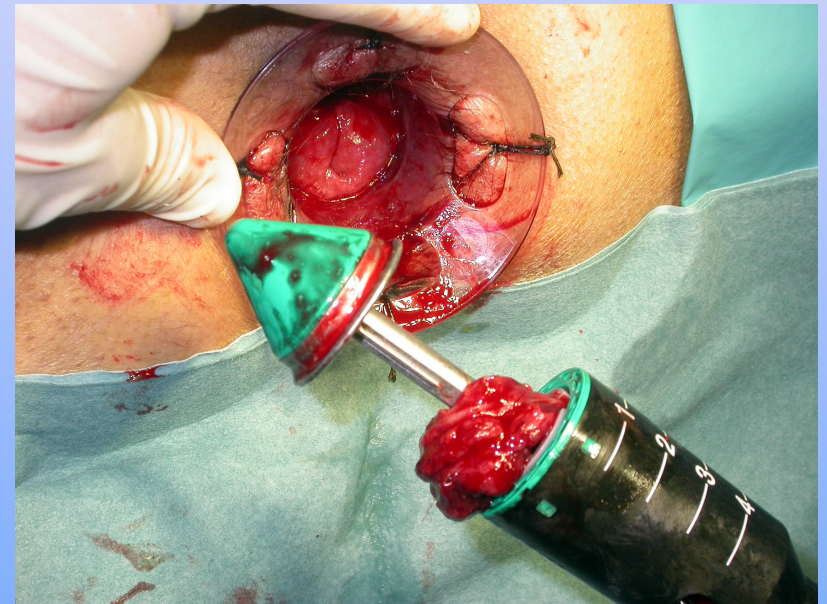
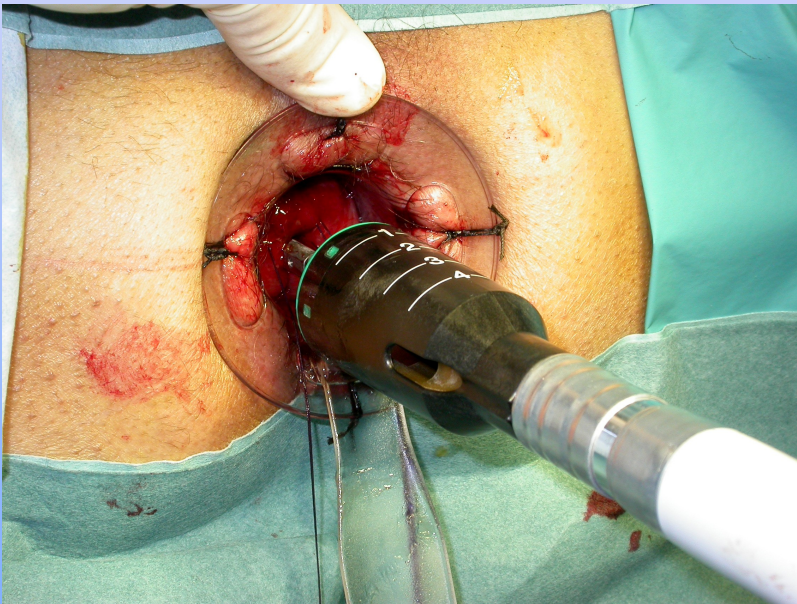
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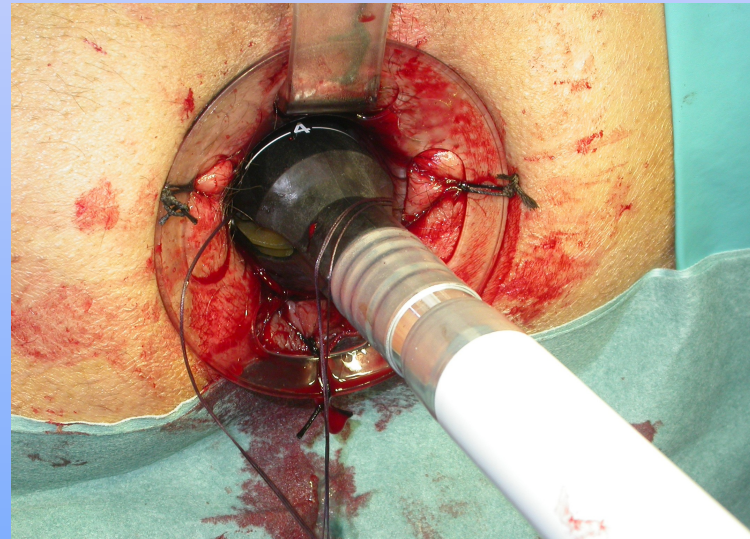
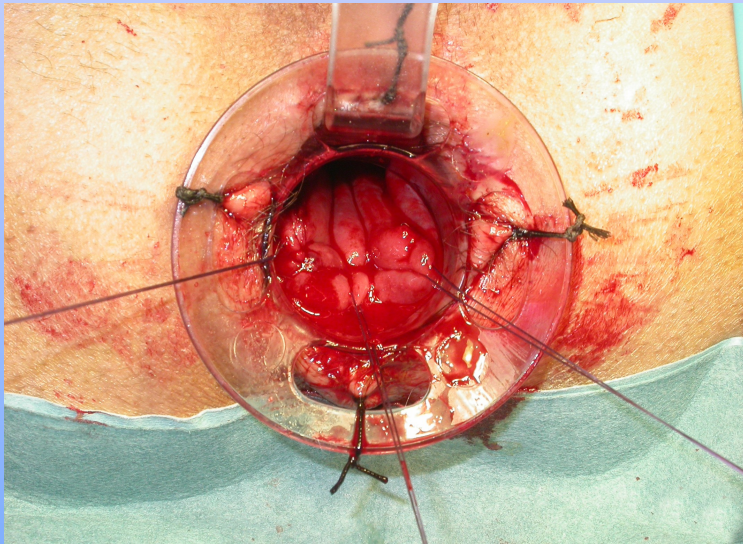
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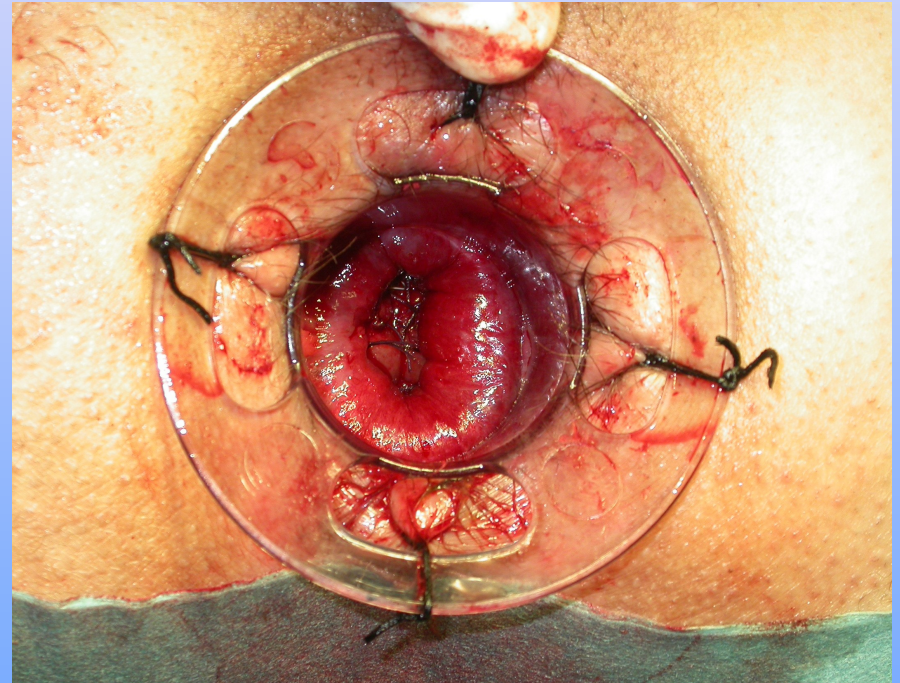
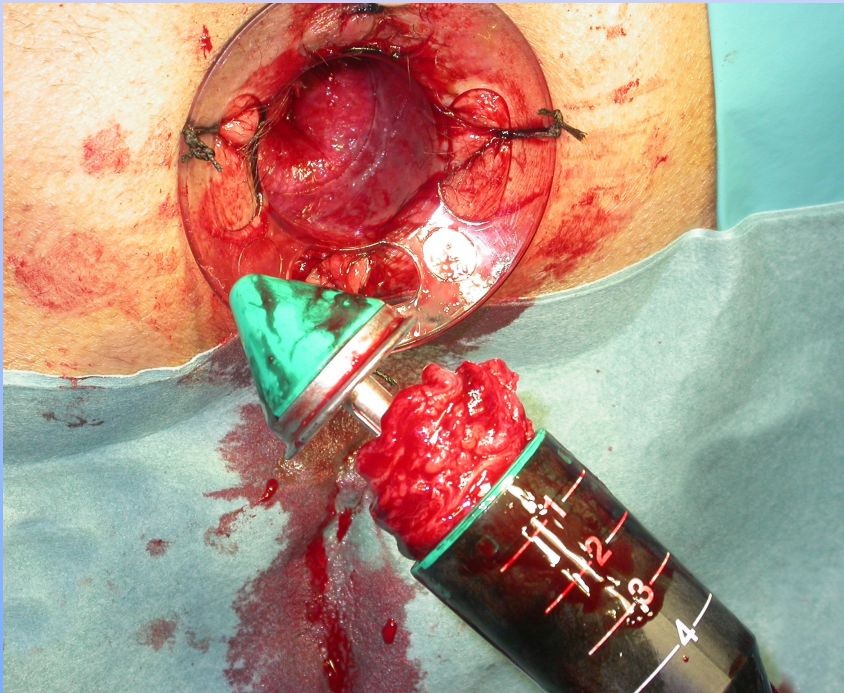
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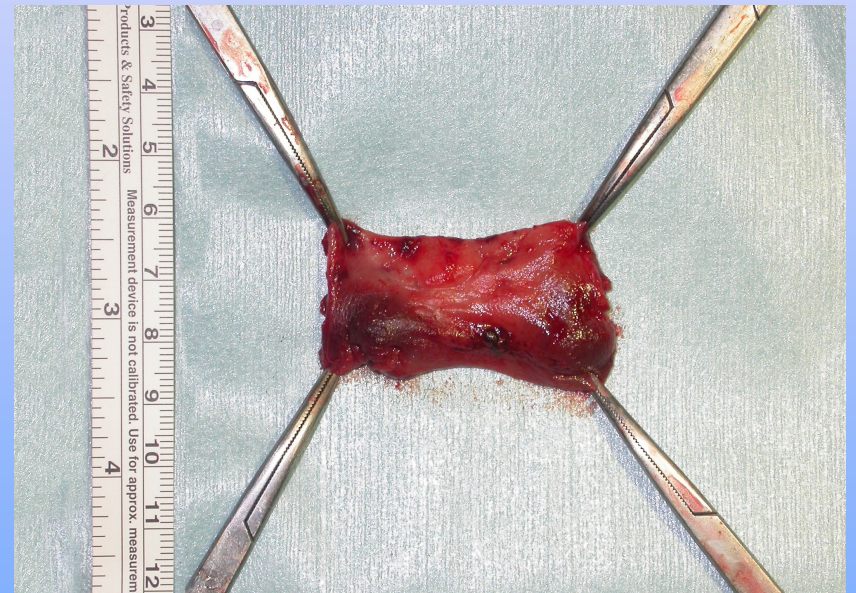
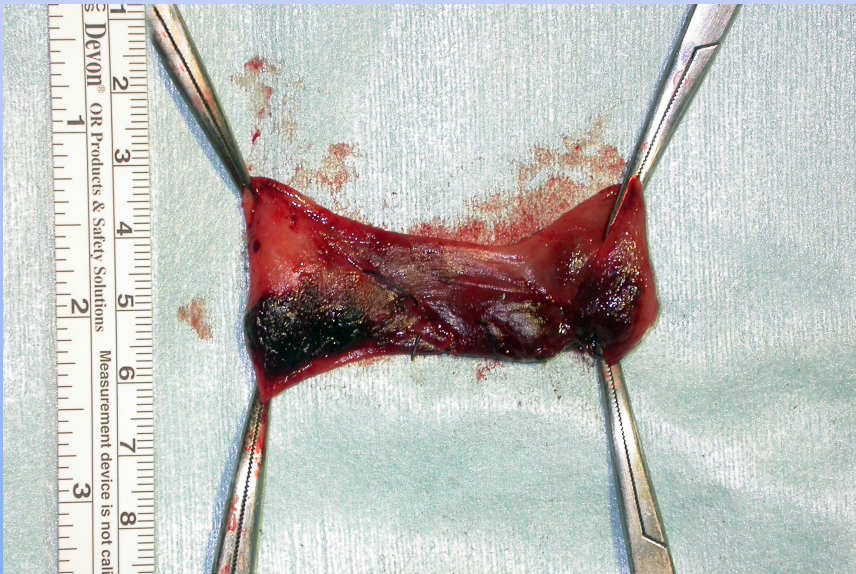
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STARR by PARACHUTE TECHNIQUE



ODS TREATMENT

STARR by PARACHUTE TECHNIQUE





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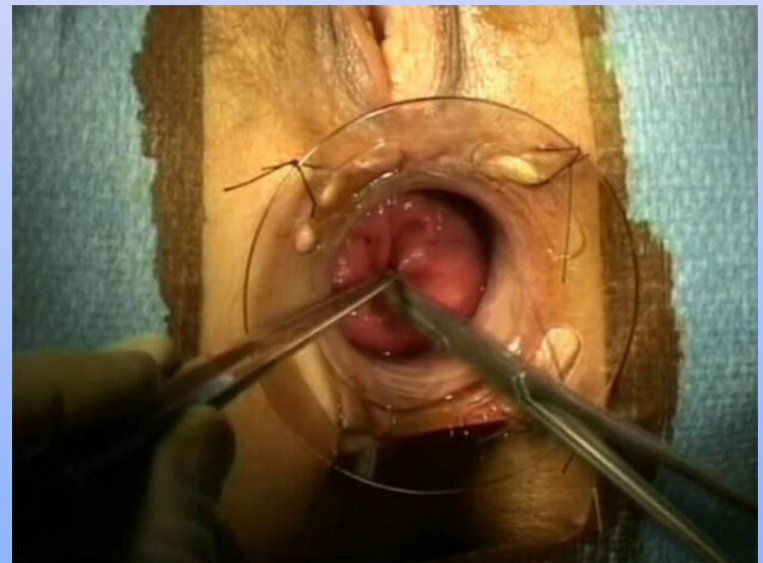
CONTOUR TRANSTARR



Increasing of resected prolapse

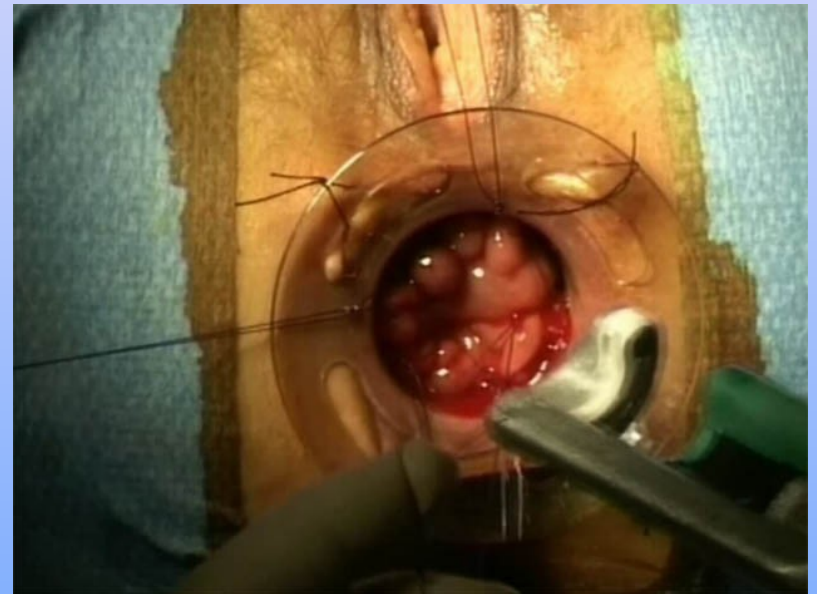
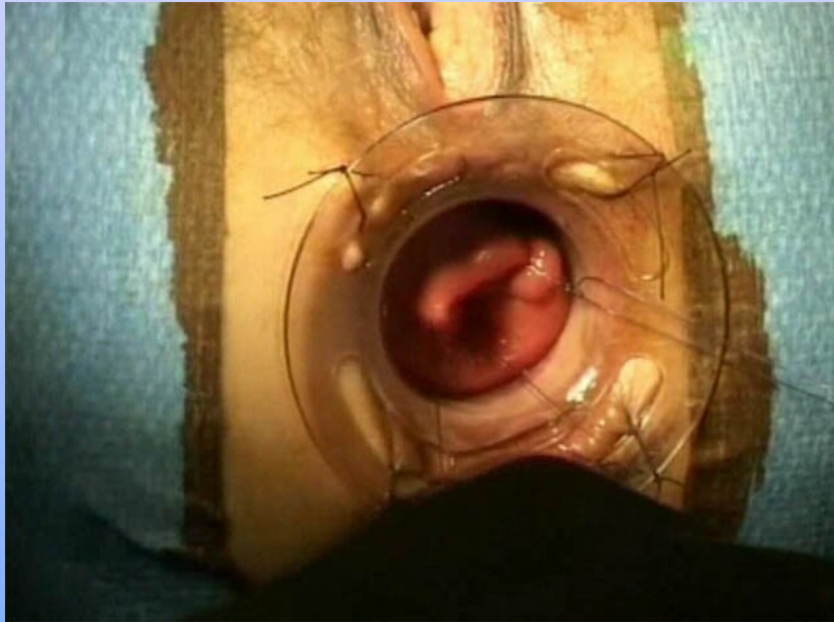
ODS TREATMENT

CONTOUR TRANSTARR



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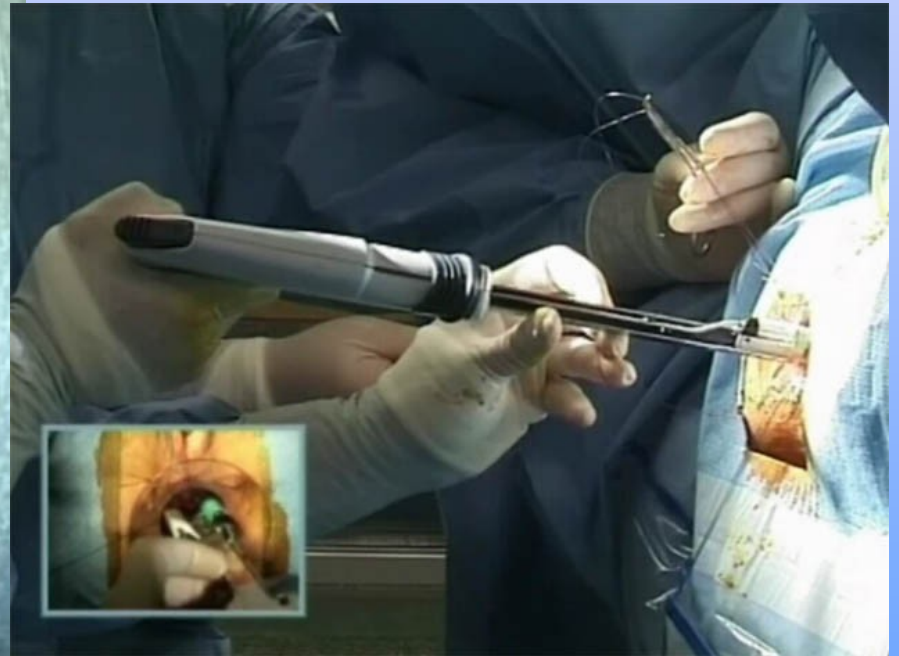
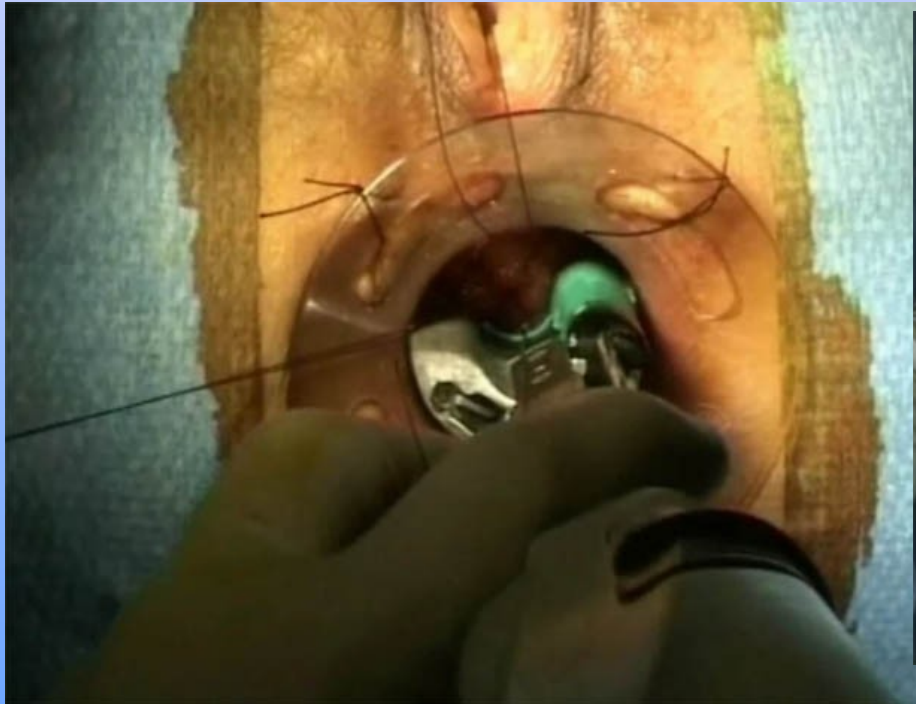
CONTOUR TRANSTARR





ODS TREATMENT

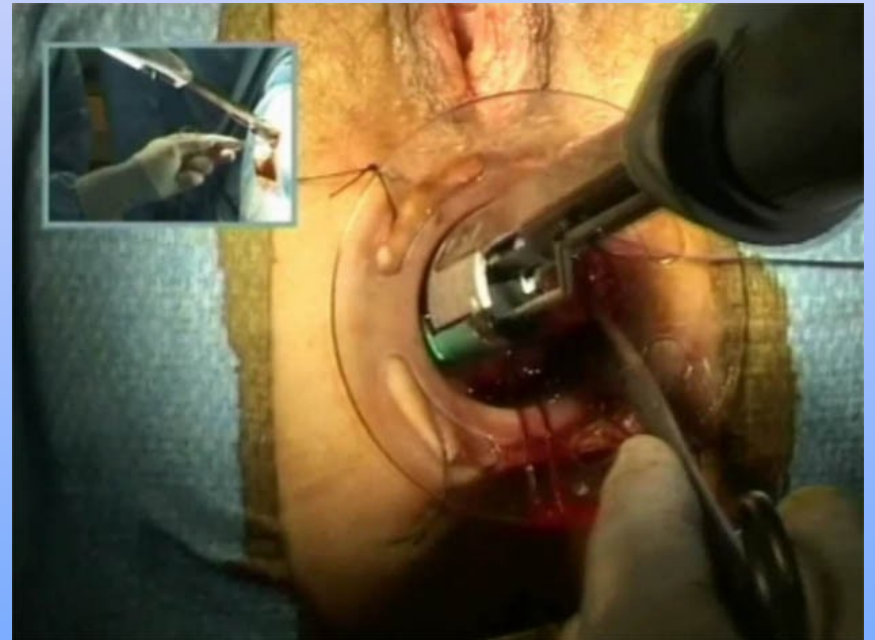
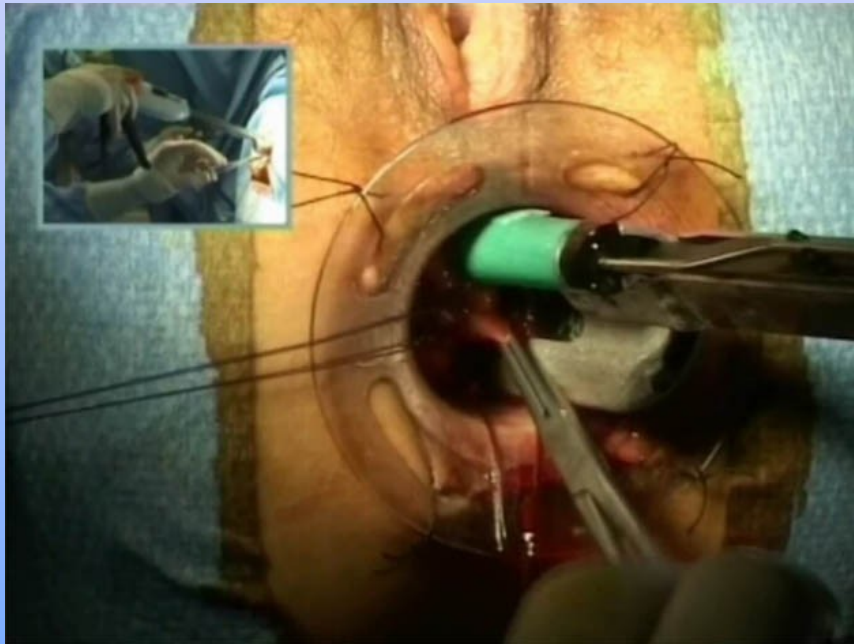
CONTOUR TRANSTARR





ODS TREATMENT

CONTOUR TRANSTARR



ODS TREATMENT

CONTOUR TRANSTARR



Obstructed Defecation Syndrome



S.T.A.R.R.

Personal experience

72 operated patients

Female : n° 61 mean age 55 y. (31-76)

Male : n°11 età mean age 52 y. (23-73)

Follow – up :34 months (1-72)

Obstructed Defecation Syndrome



S.T.A.R.R.

Personal experience

Results:

- a) Mean operative time: 43 min.**
- b) Mean stay at hospital : 4 days**
- c) Postoperative:**
 - significant pain 3%**
 - bleeding 4%**
 - other 5%**
- d) Follow-up :**
 - ODS score reduction 60%(mean)**
 - QOL > 70% (mean)**
 - Relapses : 7%**

Obstructed Defecation Syndrome



CONTOUR TRANSTARR

Personal experience

n°6 operated patient:

female : n°6 mean age 54 y. (33-79)

male : n°0

Follow up :6 months (0-12)

Obstructed Defecation Syndrome



CONTOUR TRANSTARR

Personal experience

Results:

- a) Mean operative time: 58 min.**
- b) Mean hospital stay: 3 days**
- c) Postoperative:**
 - significant pain : 0%**
 - bleeding: light 1 patient 1 day**
 - urgency: 15%**
- d) Follow-up:**
 - ODS score reduction 60%**
 - QOL > 70%**
 - Relapses 0%**