I. R. C. C .S.

C. R. O. B.

Istituto di Ricovero e Cura a Carattere Scientifico

CENTRO DI RIFERIMENTO ONCOLOGICO DELLA BASILICATA

Rionero in Vulture (PZ)

THE ROLE OF SURGERY IN ANAL CANCER

Rionero in V. 31/10/2014

CANAL ANAL ANATOMY AND ITS DIFFERENT PATHOLOGY

Intraanal lesions

-Lesion of anal canal from rectal-anal transition area

-**Poorly Differentiated**

-More common in women

Perianal lesions

- Completely visible

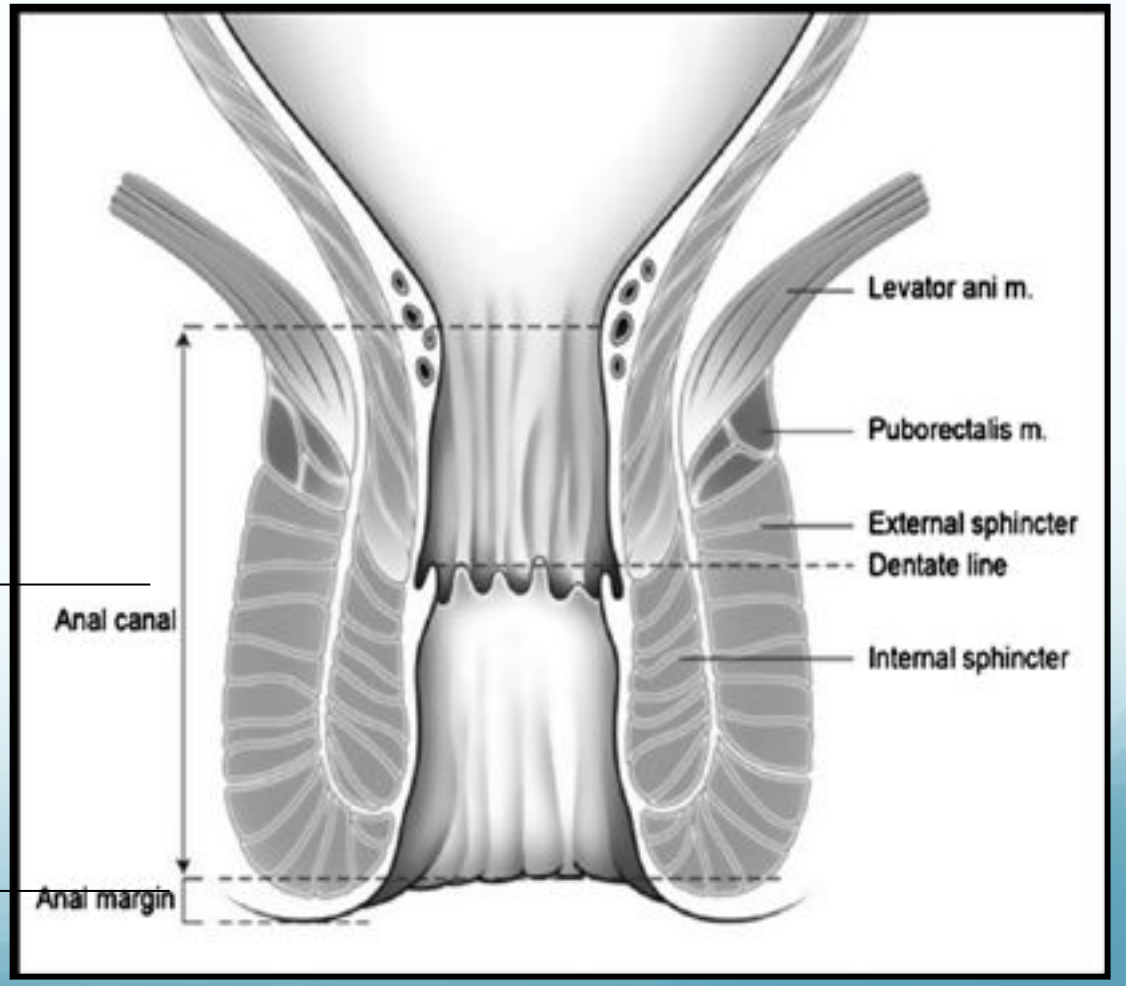
-Within a 5-cm radius of anal orifice

-**Well Differentiated**

-More common in men

Skin lesions

- Outside of the 5-cm radius



Guidelines

Anal cancer: ESMO–ESSO–ESTRO clinical practice guidelines for diagnosis, treatment and follow-up ☆

Robert Glynne-Jones [a], Per J. Nilsson [b], Carlo Aschele [c], Vicky Goh [d], Didier Peiffert [e], Andrés Cervantes [f], Dirk Arnold [g,*]

Radiotherapy and Oncology 111 (2014) 330–339

TNM staging. American Joint Committee on Cancer/Union for International Cancer Control (AJCC/UICC) seventh edition TNM clinical and pathological classification of anal cancer

Primary tumour (T)	
TX	Primary tumour cannot be assessed
T0	No evidence of primary tumour
Tis	Carcinoma in situ (i.e., Bowen disease, high-grade squamous intraepithelial lesion, and anal intraepithelial neoplasia II–III)
T1	Tumour ⩽2 cm in greatest dimension
T2	Tumour >2 cm but ⩽5 cm in greatest dimension
T3	Tumour >5 cm in greatest dimension
T4	Tumour of any size invades adjacent organ(s), e.g., vagina, urethra, and bladder.

Regional lymph nodes (N)	
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastases in perirectal lymph node(s)
N2	Metastases in unilateral internal iliac and/or inguinal lymph node(s)
N3	Metastases in perirectal and inguinal lymph nodes and/or bilateral internal iliac and/or inguinal lymph nodes

Distant metastasis (M)	
M0	No distant metastasis
M1	Distant metastasis

Anatomic stage/prognostic groups

Stage	T	N	M
0	Tis	N0	M0
I	T1	N0	M0
II	T2	N0	M0
	T3	N0	M0
IIIA	T1	N1	M0
	T2	N1	M0
	T3	N1	M0
	T4	N0	M0
IIIB	T4	N1	M0
	Any T	N2	M0
	Any T	N3	M0
IV	Any T	Any N	M1

FACTORS TO CONSIDER IN TREATMENT DECISION-MAKING FOR AC

Disease-related factors	Patient-related factors	Other
Clinical and radiological TNM stage	Patient preferences	Local expertise (brachytherapy etc.)
Site of tumour (margin, canal, rectal)	Biological age/renal function/Charlson geriatric assessment	Geriatricians with interest in oncology
Extent of tumour i.e. involvement of vagina (risk of fistulation) in addition to size	Co-morbidities/current medications and performance status	
Response to treatment (early and at 26 weeks)	Socio-economic and psychological factors/social support	
Need for symptom control	Severity of initial symptoms	Specialist palliative care

STAGE AND SITE-BASED TREATMENT

Anal canal	
Surgery (radical or local excision) generally contraindicated as primary treatment option	
STAGE I	- Standard dose radiotherapy (RT), infused 5FU and mitomycin (stage group under-represented in randomised studies) - low dose RT, infused FU and mitomycin (no data from randomised studies)
STAGE II–III	- Standard dose RT, infused FU and mitomycin (evidence from multiple randomised studies)
STAGE IV	- 5-FU and cisplatin, carboplatin/taxol, or possibly irinotecan/cetuximab
Anal margin	
STAGE I, well differentiated	- Local excision (re-excision or chemoradiation if involved/close margins)
STAGE II–III	- standard dose RT, infused 5FU and mitomycin C
STAGE IV	- 5-FU and cisplatin, or carboplatin/taxol

Radiotherapy and Oncology 111 (2014) 330–339

WHEN..... SURGERY?

Impossibile visualizzare l'immagine collegata. È possibile che il file sia stato spostato, rinominato o eliminato. Verificare che il collegamento rimandi al file e al percorso corretti.

SURGERY AS PRIMARY TREATMENT

Until the mid-1980s, radical surgery was the cornerstone of treatment. However, following publications from the 1970s on combined modality therapy, surgery as the primary therapeutic option has generally been abandoned.

STILL TODAY:

LOCAL EXCISION is recommended in:

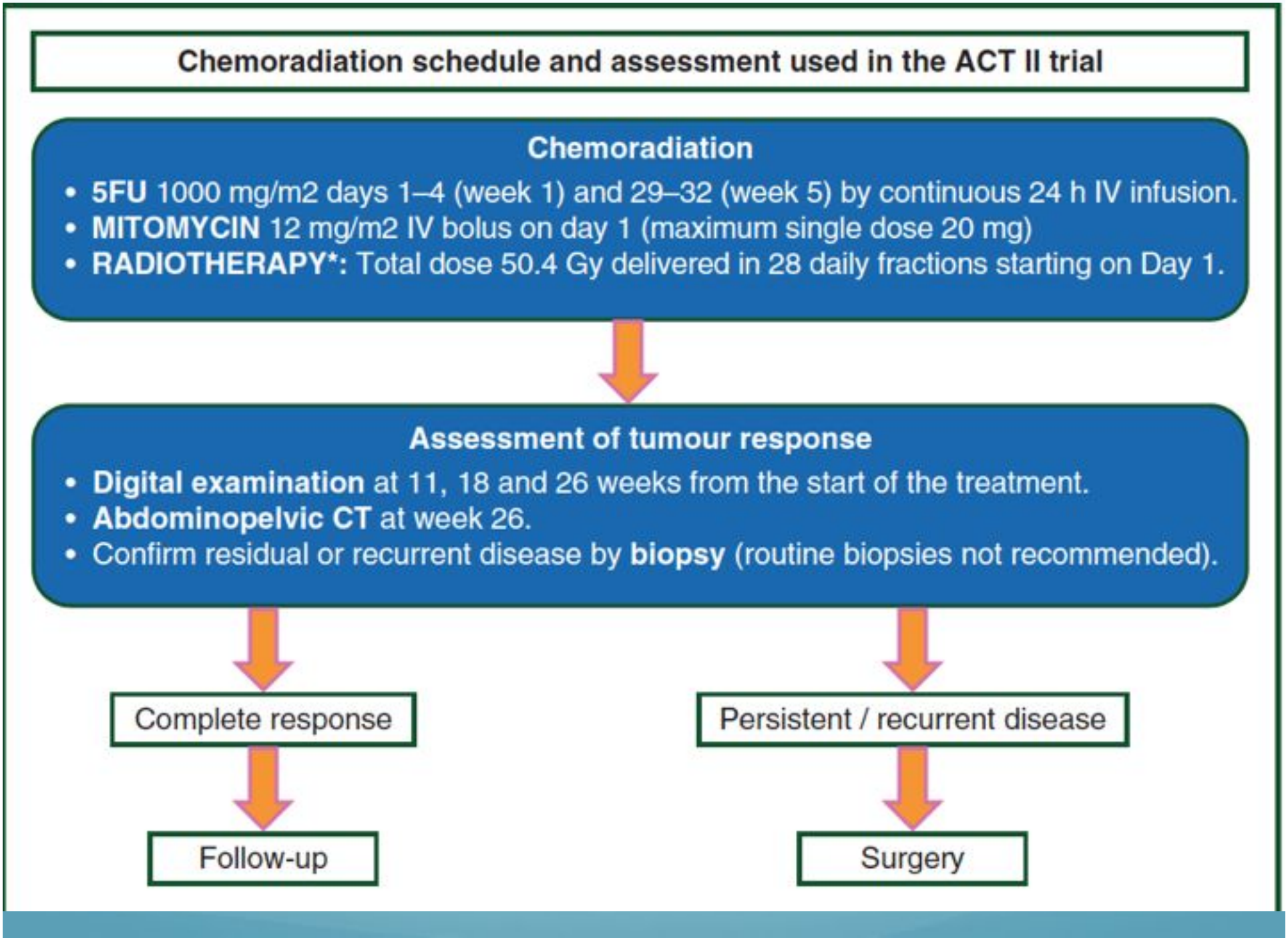
-Small lesion < 2cm
-Involving anal margin

BUT controindicated:

-In poorly diffentiated
-In lymphnodal involvement

AND discussed in canal anal small lesions

If inadeguate surgical margins (<5mm), it needs a new local excision


Chemoradiation schedule and assessment used in the ACT II trial
Chemoradiation
• 5FU 1000 mg/m2 days 1–4 (week 1) and 29–32 (week 5) by continuous 24 h IV infusion.
• MITOMYCIN 12 mg/m2 IV bolus on day 1 (maximum single dose 20 mg)
• RADIOTHERAPY*: Total dose 50.4 Gy delivered in 28 daily fractions starting on Day 1.
Assessment of tumour response
• Digital examination at 11, 18 and 26 weeks from the start of the treatment.
• Abdominopelvic CT at week 26.
• Confirm residual or recurrent disease by biopsy (routine biopsies not recommended).
Complete response
Follow-up
Persistent / recurrent disease
Surgery

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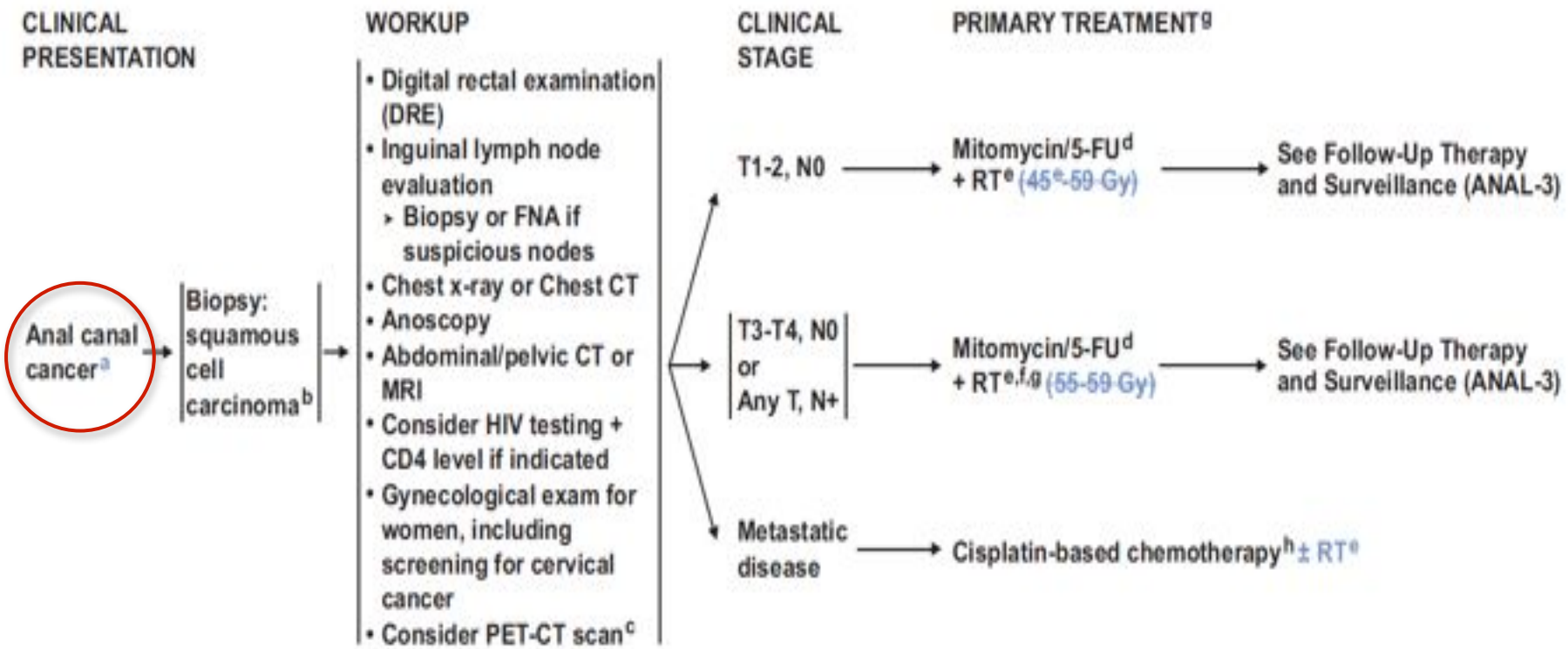
Journal of the National Comprehensive Cancer Network



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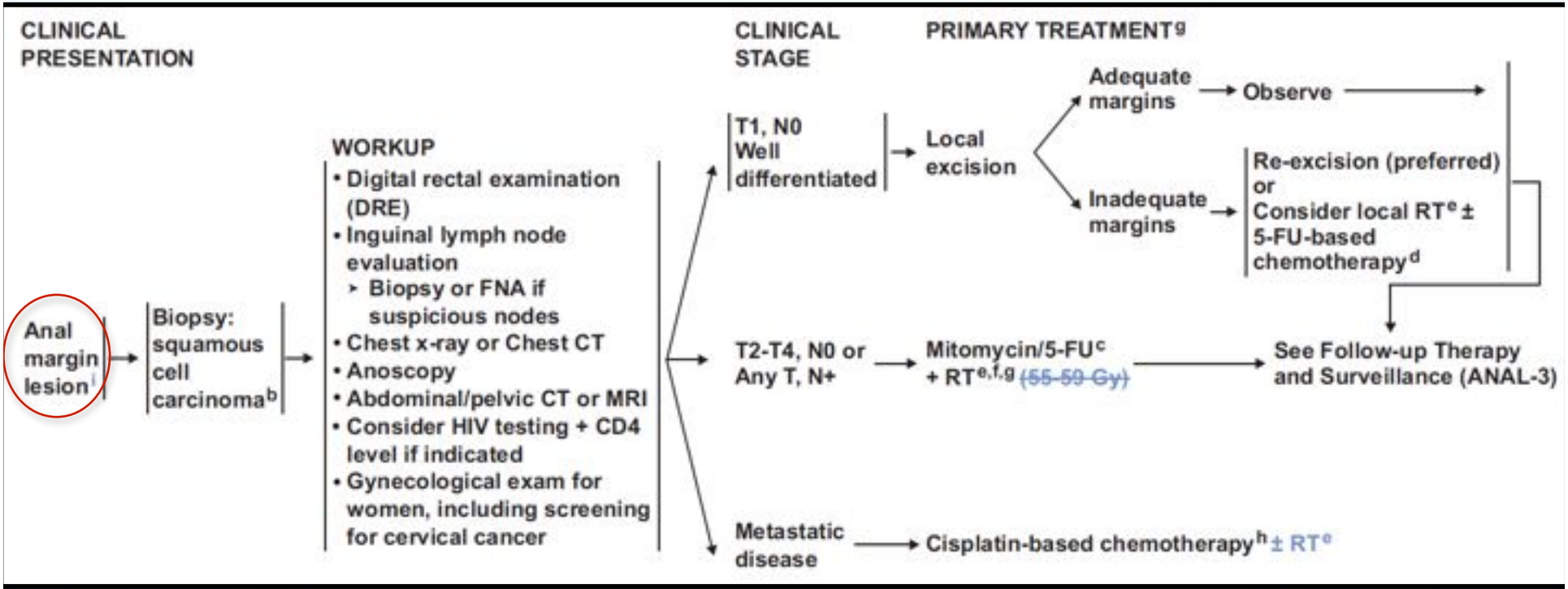
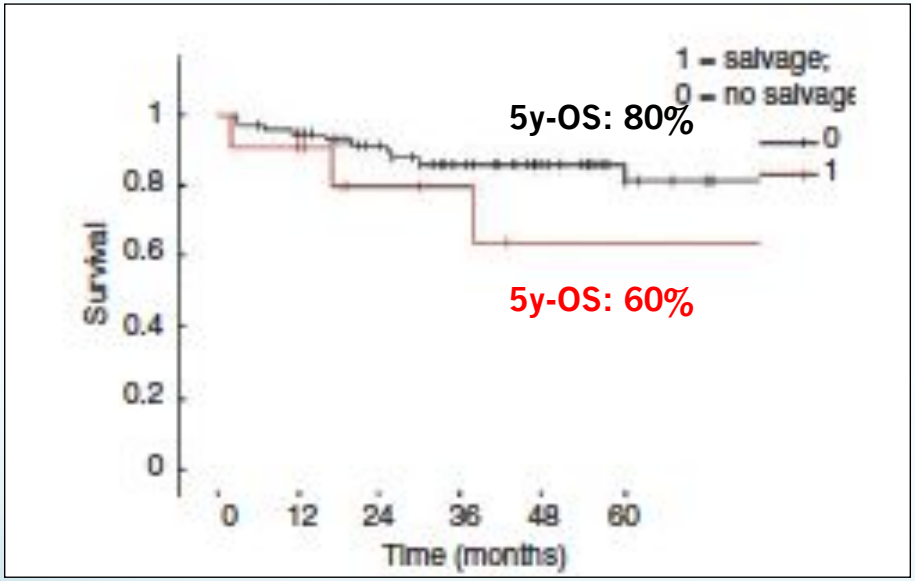


Outcome of salvage surgery for anal squamous cell carcinoma

D. A. Harris*, J. Williamson*, M. Davies*, M. D. Evans*, P. Drew† and J. Beynon* on behalf of the Swansea Pelvic Oncology Group

2013, Association of colonproctology of Great Britain



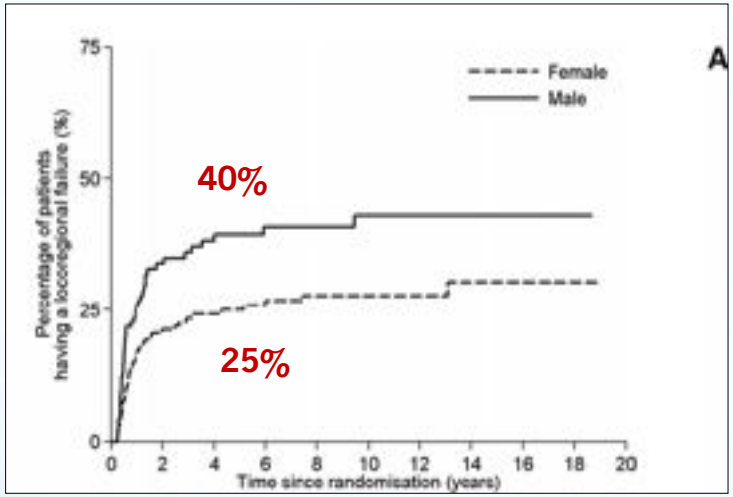
OS of persistent/recurrent desease treated with only ChRt or plus Salvage Surgery

Prognostic Factors for Recurrence and Survival in Anal Cancer

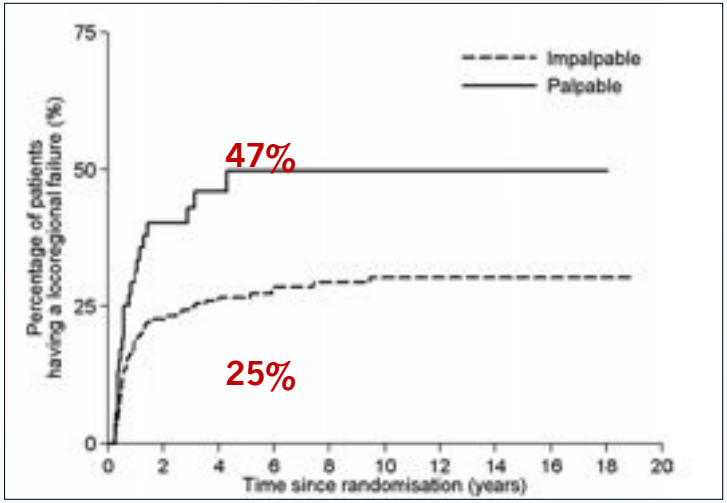
Generating Hypotheses From the Mature Outcomes of the First United Kingdom Coordinating Committee on Cancer Research Anal Cancer Trial (ACT I)

Robert Glynne-Jones, MD, FRCR[1]; David Sebag-Montefiore, MD, FRCR[2]; Richard Adams, MD, FRCR[3]; Simon Gollins, MD, FRCR[4]; Mark Harrison, MD, FRCR[1]; Helen M. Meadows, MSc[5]; Mark Jitlal, MSc[5]; for the United Kingdom Coordinating Committee on Cancer Research Anal Cancer Trial Working Party

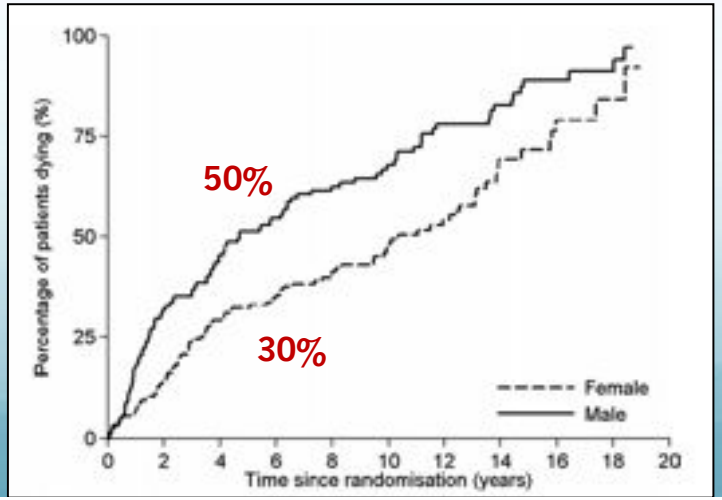
5y-LR-RECURRENCE



5y-LYMPHNODAL-RECURRENCE



5y- DEATH PERCENTAGE

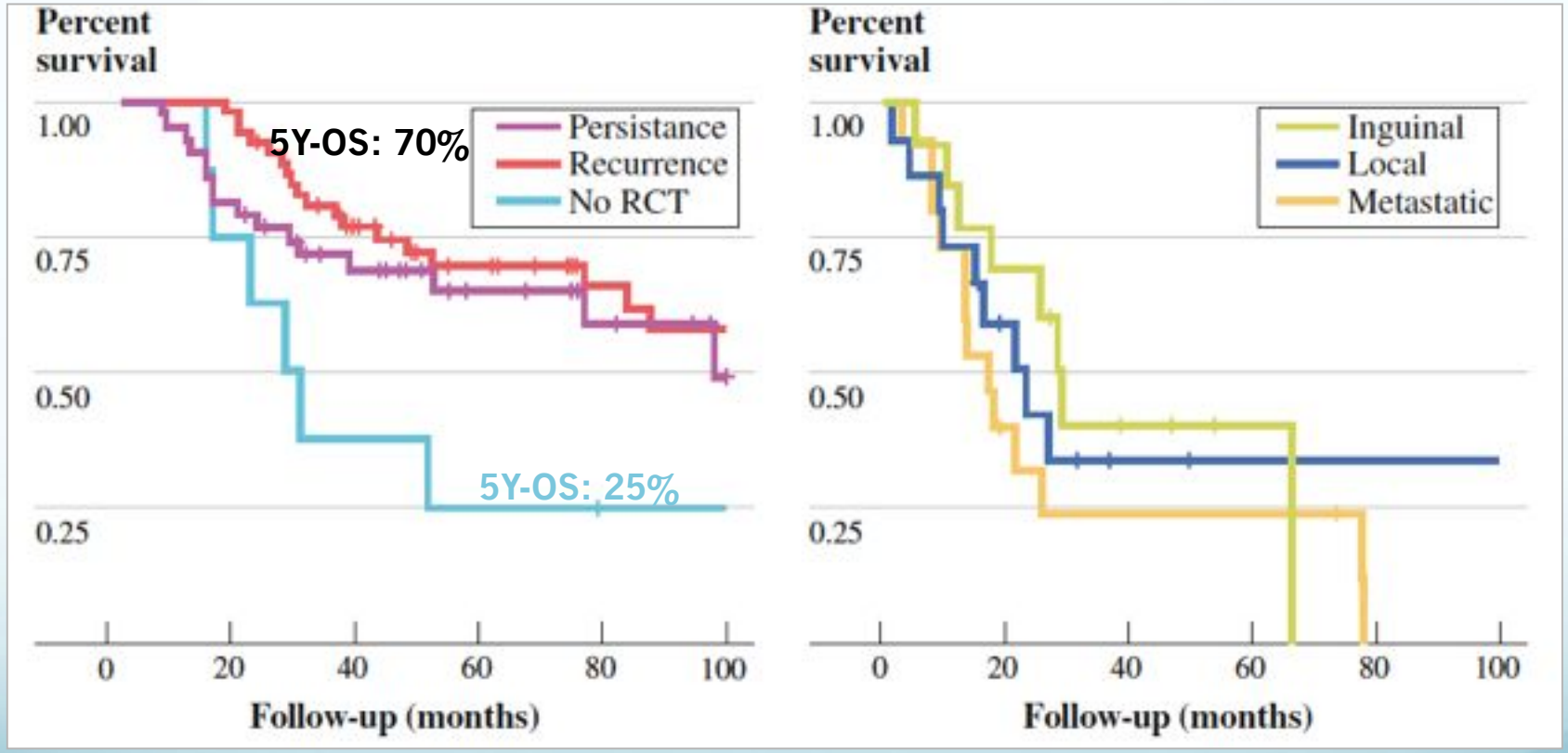


Cancer February 15, 2013

Ann Surg Oncol (2012) 19:4186–4192

Abdominoperineal Resection for Squamous Cell Anal Carcinoma: Survival and Risk Factors for Recurrence

Jérémie H. Lefèvre, MD[1], Hélène Corte, MD[1], Emmanuel Tiret, MD[1], David Boccara, MD[2], Marc Chaouat, MD[2], Emmanuel Touboul, MD[3], Magali Svrcek, MD, PhD[4], Magalie Lefrancois, MD[1], Conor Shields, MD[1], and Yann Parc, MD, PhD[1]



- RECURRENCES: 40%
- SIDE OF RECURRENCES DIDN' T INFLUENCE OS
- SURVIVAL BENEFIT FROM CHRT

Ann Surg Oncol (2012) 19:4186–4192

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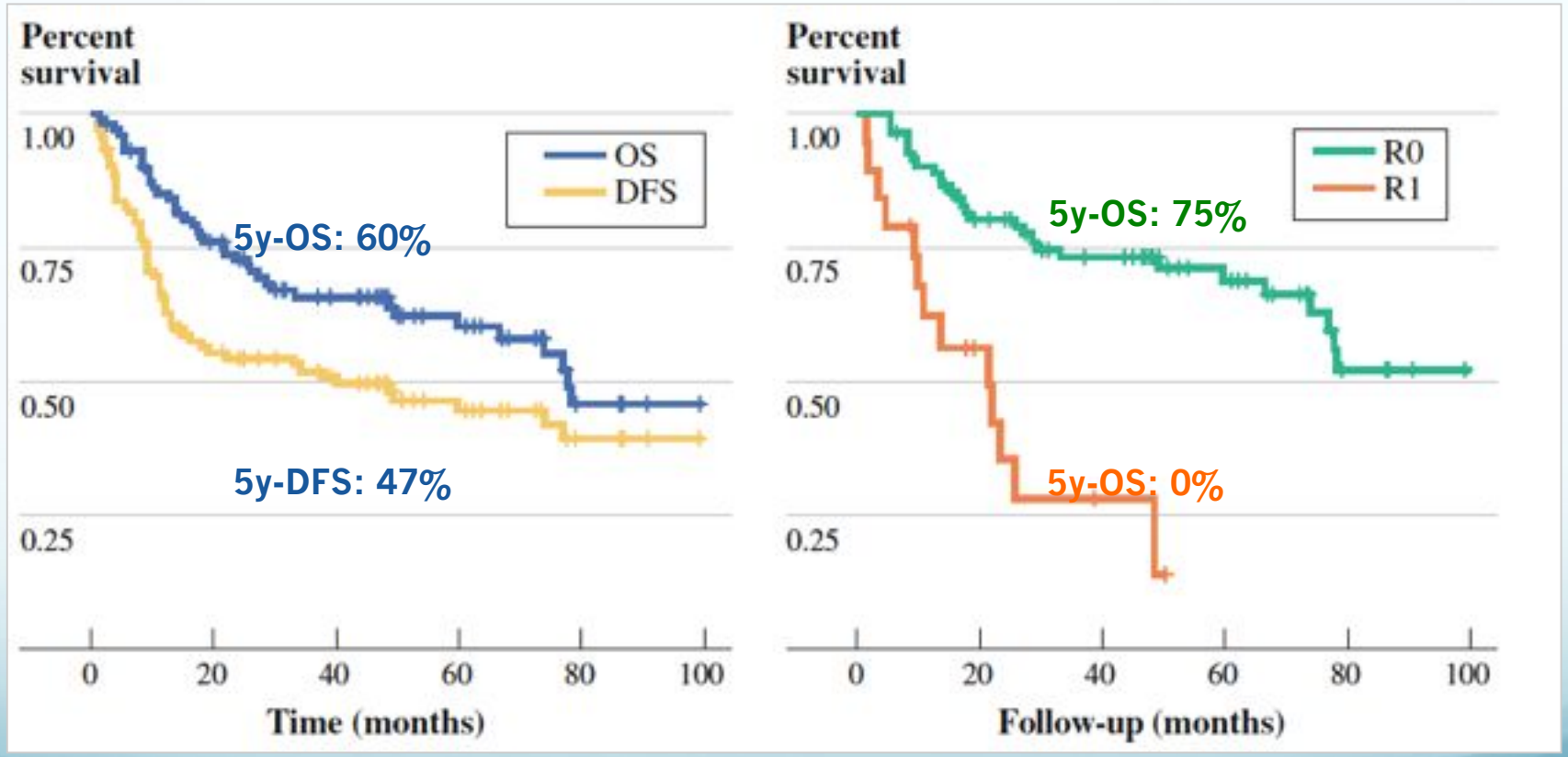
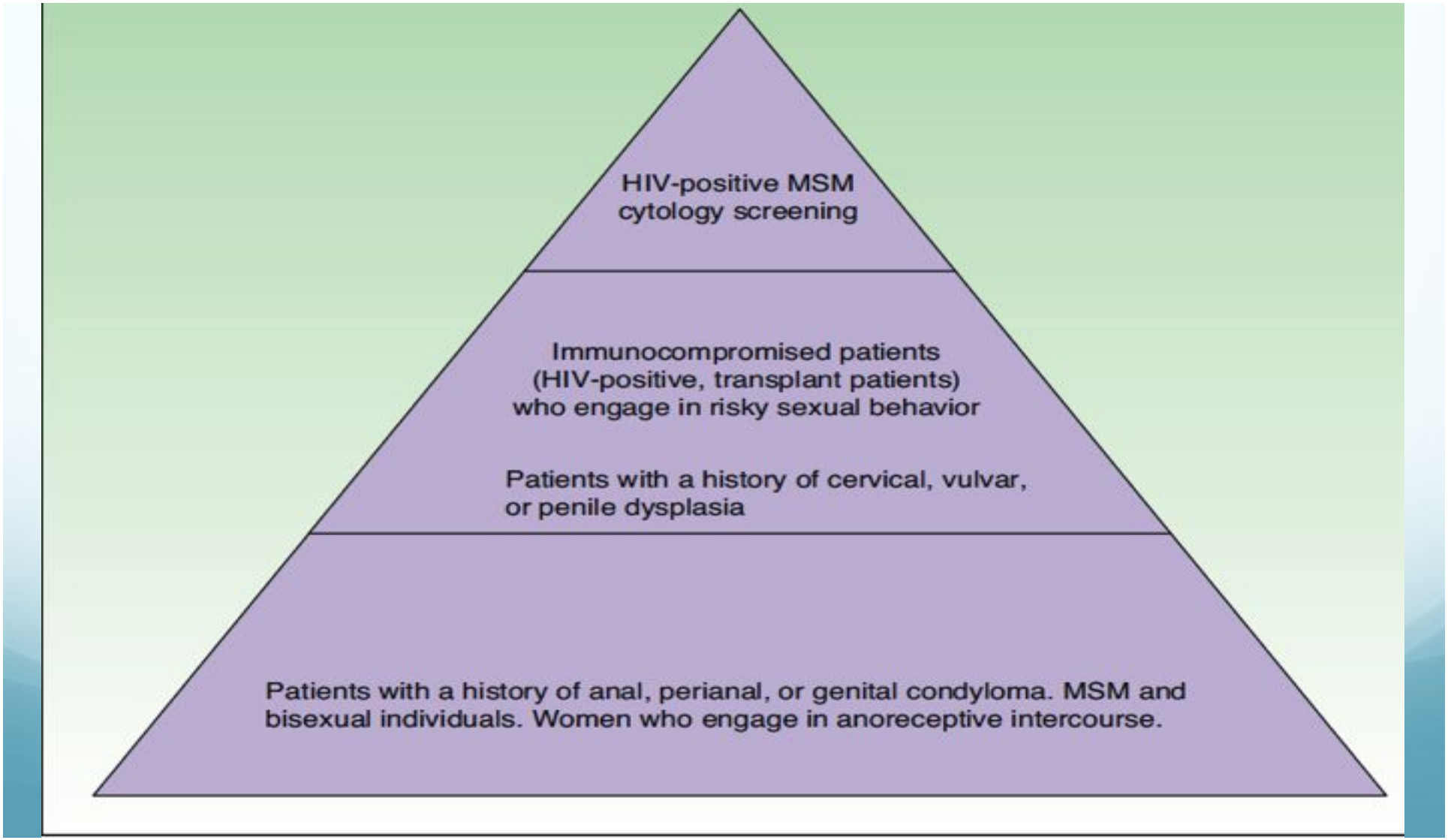


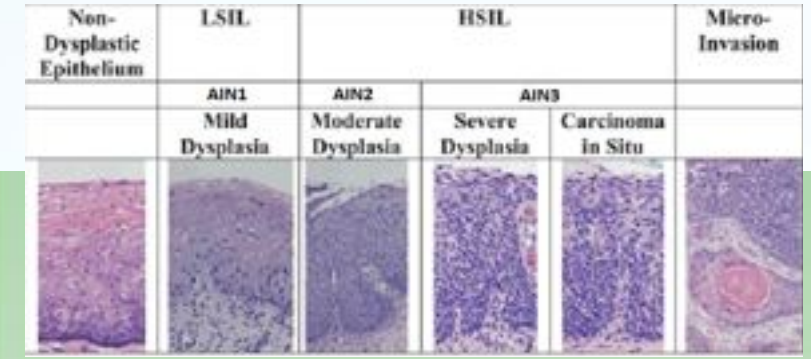
THE MAJOR PROGNOSTIC FACTOR OF OS, AFTER SALVAGE SURGERY, IS
THE POSITIVITY OF SURGICAL MARGINS
THE NEED OF AN **EXTENSIVE SURGERY**

REVIEW

Early Detection of Anal Intraepithelial Neoplasia in High-Risk Patients☆

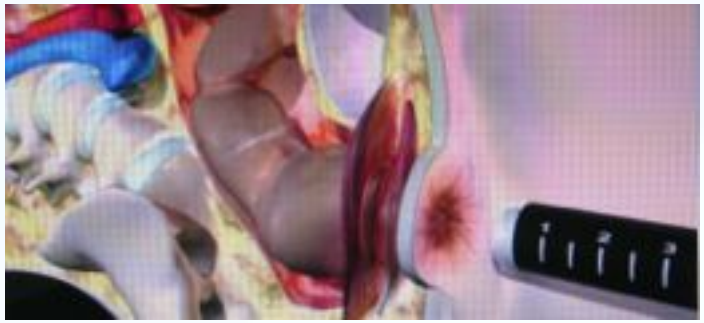
E. Sendagorta,[a,*] P. Herranz,[a] H. Guadalajara,[c] F.X. Zamora[b]

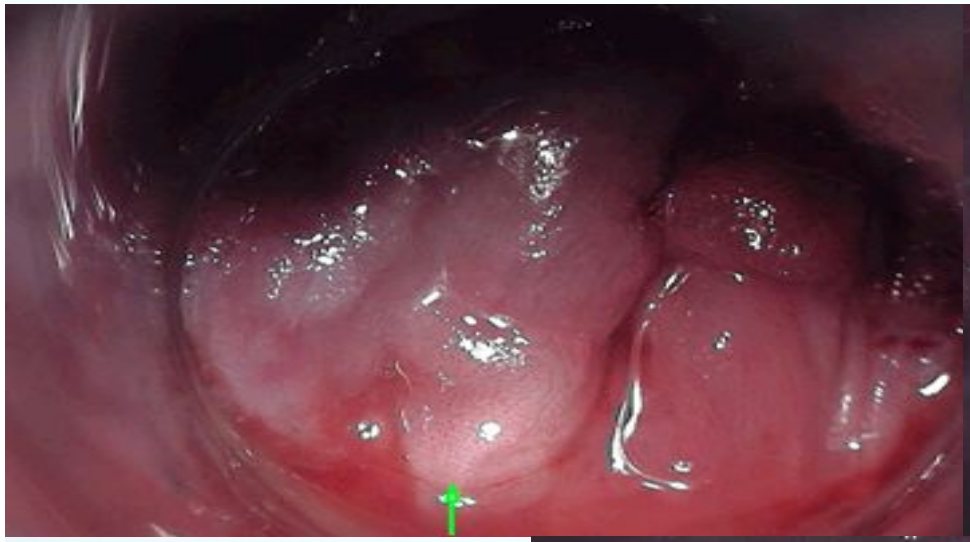


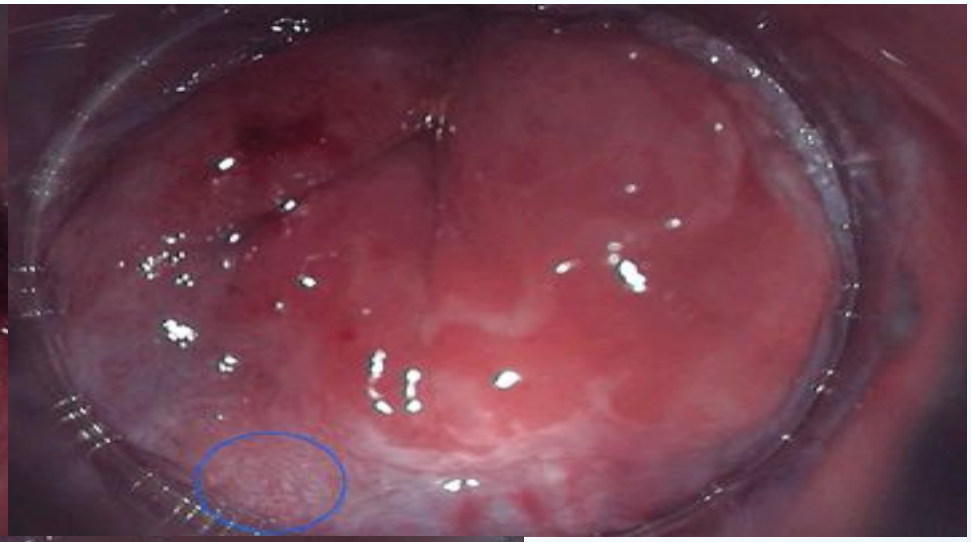

Non-Dysplastic Epithelium
LSIL
HSIL
Micro-Invasion
AIN1
AIN2
AIN3
Mild Dysplasia
Moderate Dysplasia
Severe Dysplasia
Carcinoma in Situ

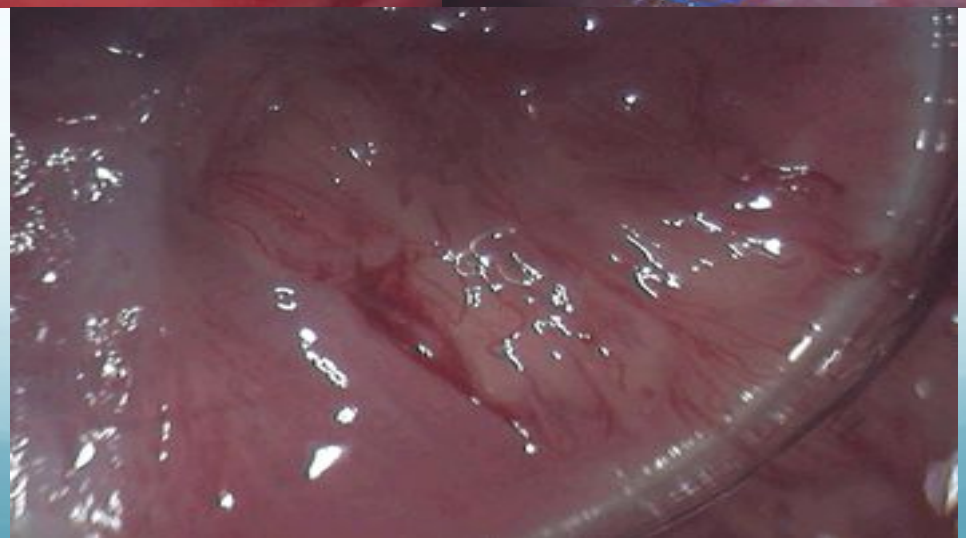
Anal cytology screening
Normal
ASCUS
LSIL
HSIL
HIV-positive
HIV-negative
High-resolution anoscopy with biopsy
Repeat cytology in 1 y
Repeat cytology in 2 to 3 y
Normal
AIN 1 (LG)
AIN 2 and 3 (HG)
Follow-up every 6 mo
Treat

DIGITAL VIDEOPROCTOSCOPY









Will local ablation of high grade anal intraepithelial neoplasia prevent invasive anal cancer?

Alessia Dalla Pria and Mark Bower

AIDS 2013, **27**:1185–1186

Yes, treatment causes regression of AIN. However whether this prevents the evolution of invasive cancer remains uncertain. In one study of anal cancer in people living with HIV, seven of 74 patients had been enrolled on

29% [11]. It is also important to note that the rates of AIN2/3 were higher in women (7%) than in MSM (5%) and heterosexual men (1%). Both these findings have important relevance to screening programs and health economic studies of these projects.

- A GOOD PROGRAM OF SCREENING IS NECESSARY TO PREVENT PRE-CANCEROUS LESIONS
- BUT THE TREATMENT OF THESE LESIONS REMAINS DEBATED FOR THE PREVENTION OF ANAL CANCER

CONCLUSIONS

- AC NEEDS A MULTIDISCIPLINARY TEAM AND TREATMENT

- THE SURGEON, IN LOCALLY ADVANCED AC , FOLLOWS THE ONCOLOGIST/RADIOTERAPIST IN PERSISTENT/RECURRENT DESESASE

- IN EARLY STAGES, EXSPECIALLY IN ANAL MARGIN CANCER, SURGERY IS ESSENTIAL

- A PATHOLOGICAL SCORE COULD BE HELPFUL TO DISCRIMINATE A SUBGROUP OF PATIENTS AT HIGH RISK OF RECURRENCE OR PERSISTENT DESEASE

- HYMMUNODEFICIENT PATIENTS REQUIRE A STRONG SCREENING PROGRAM

- DIGITAL PROCTOSCOPY COULD BE PROMISING FOR AN EARLY DIAGNOSIS OF AC IN HIGH RISK PATIENTS