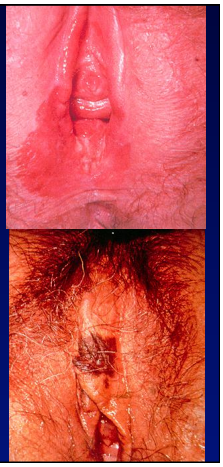
VIN & Vulval Cancer

Andreas Obermair
Gynaecological Oncologist, Brisbane
www.obermair.info

Vulval Intraepithelial Neoplasia (VIN)

Vulval Intraepithelial Neoplasia

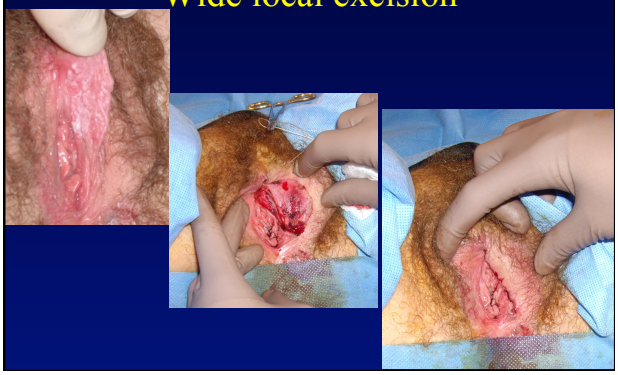
- 90% of VIN test positive for HPV (Cigarette smoking a co-factor in 75%)
- 30% of women have concurrent CIN
- Amenable to HPV immunisation
- Diagnosis: colposcopy (AA), biopsy



Treatment of VIN

1. Surgical excision (histology, margins)
2. Ablation (no histology, concern depth)
3. Topical
   a. Imiquimod/Aldara: topical immune response modifier, total of 162 patients reported (CR 50%, PR 25%; REC 16%).
   b. 5-FU/Efudex: 75% response rate, often poorly tolerated (desquamation)
4. Experimental: photodynamic, antiviral

Wide local excision



Vulval Cancer

Incidence

- ~ 45 pts. p. a. QLD (increasing)
- 180 pts. Australia–wide
- 25% patients will die from disease

Uncommon !

Risk Factors

	TYPE 1	TYPE 2
Age	< 55 yrs.	> 55 yrs.
VIN	Often	Lichen scl.
STDs	Often	Rarely
CIN	Often	Rarely
Cigarette smoking	Often	Rarely
Histology	Poorly diff.	Better diff.

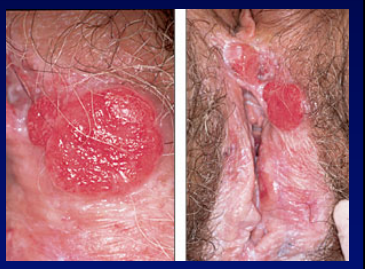
Symptoms

- Unspecific - itching, pain, discharge
- Patients' delay: 2 to 16 months
- Clinician's delay: 12 months

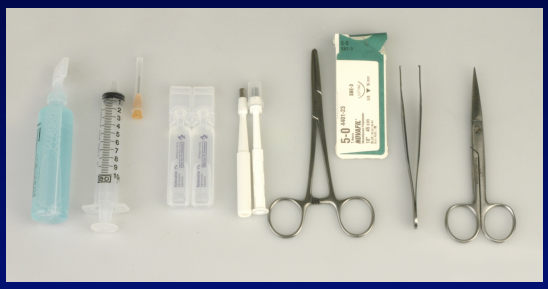
Areas: Labia, clitoris, perineum

Avoid Delay - Biopsy

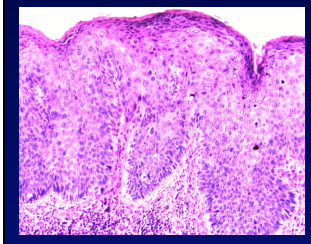
- Punch biopsy down to the dermis including underlying connective tissue (assess depth of invasion).



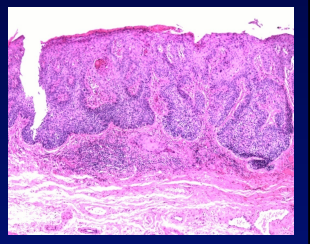
Vulval biopsy



Histological Types

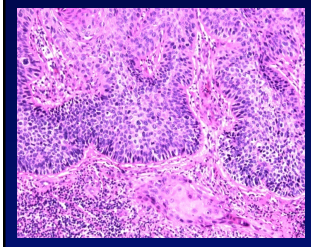
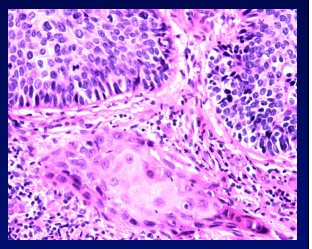


VIN 3



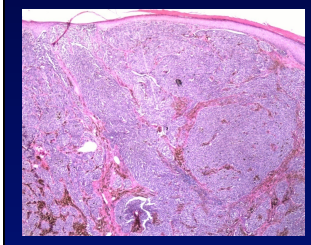
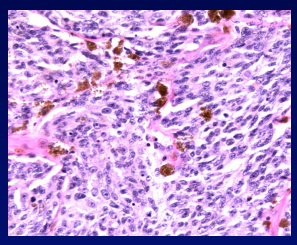
Microinvasive SCC

Histological Types

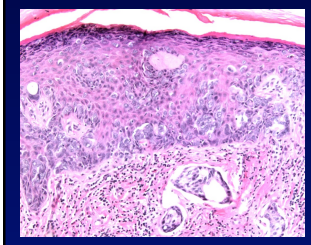
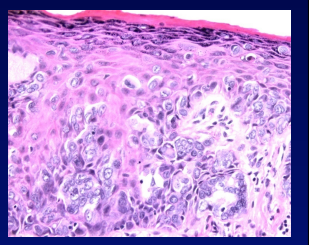



Microinvasive SCC

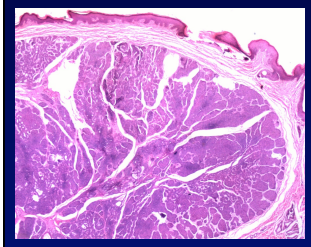
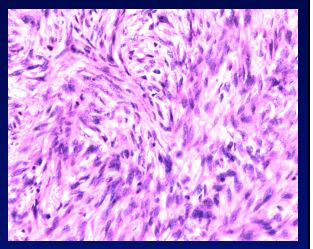
Melanoma

Paget's Disease

Others

Basal cell Carcinoma **Leiomyosarcoma**

Tumour spread

- Direct growth
  - Urethra, vagina
  - Bladder, rectum
- Lymph nodes
  - Groins
  - Pelvic nodes
- Haematogenous metastasis
  - Rarely: Liver, lung

Staging (FIGO 2009)*

Stage 1	**Tumour confined to the vulva; nodes negative**
1A	Lesion confined to vulva, ≤ 2 cm diameter, ≤ 1 mm depth of invasion
1B	Lesion confined to vulva, > 2 cm diameter, > 1 mm depth of invasion
Stage 2	**Extension into perineal structures (lower urethra, lower vagina, anus); nodes negative**
Stage 3	**Positive groin nodes**
3A	1 LN (> 5 mm) or ≤ 2 LN (< 5 mm)
3B	≥ 2 LN (> 5 mm) or ≥ LN (< 5 mm)
3C	Nodes show extracapsular spread
Stage 4	**Regional (upper urethra, upper vagina) or distant spread**
4A	Fixed to pelvic bone; invasion of upper vagina/urethra, bladder, rectum
4B	Distant metastasis, pelvic nodes

*Does not apply to staging of vulval melanoma

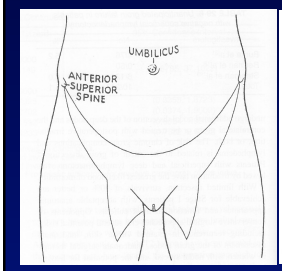
Management

- **H**istological diagnosis: Biopsy
- **E**xtent of disease:
  - Clinical exam (palpation groins, supraclavicular LN)
  - PAP smear
  - CXR
  - CT scan abdomen and pelvis
- **A**im of treatment (cure, palliation)
- **T**reatment (surgery, radiotherapy, chemotherapy, palliation).

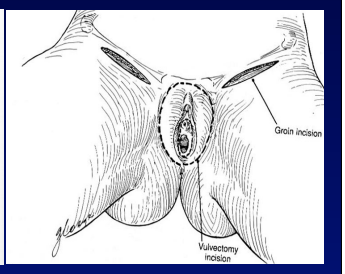
Treatment of primary site (vulva)

- Radical vulvectomy (entire vulva, incl labia maiora, en-bloc with bilateral groin nodes) is outdated!
- Radical Wide Local Excision (WLE)
  - Aim for margin 1 cm
- Primary Chemo-Radiation (following the principles from treatment of cervical ca and anal ca).
  - To preserve anus or clitoris

Surgery – separate incisions

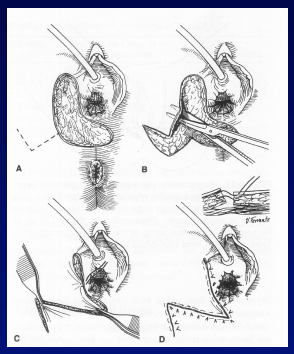


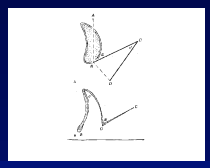
"Butterfly" incision is history



Triple incision

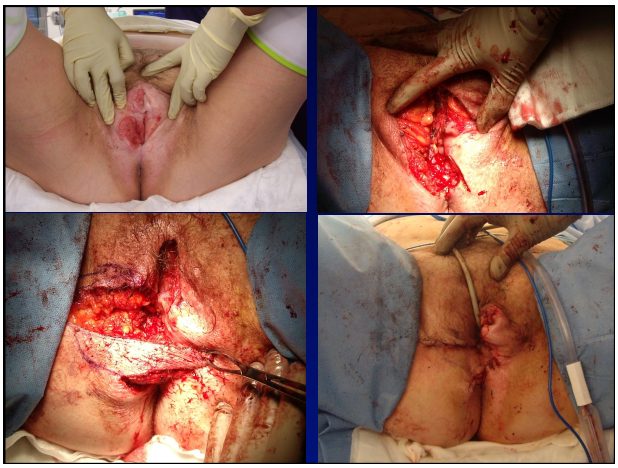
Rotational Flaps



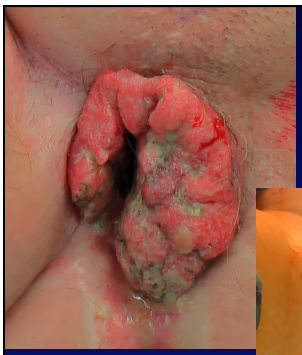


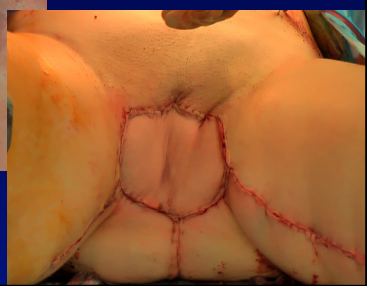
Pudendal Thigh Flap

Rhomboid Flap



Pelvic Exenteration



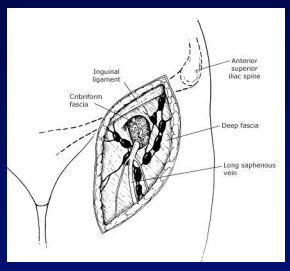


Depth of invasion – Groin Nodes

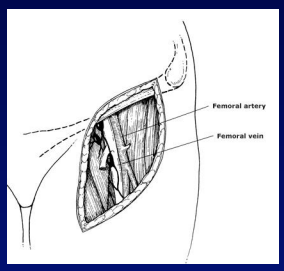
Depth Invasion	*% Positive*
≤ 1mm	0
1-2 mm	7.6
2-3 mm	8.4
3-5 mm	26.7
> 5 mm	34.2
Overall	10.7

Hacker: Practical Gynecologic Oncology, 2000

Treatment of groin nodes basin



Superficial groin nodes



Deep groin nodes

Lymph Node Dissection (Groin)

No LND for stage 1A (≤1 mm invasion)

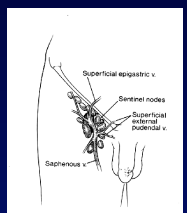
- Unilateral (unifocal, lateral ~ 1 cm from midline, not anteriorly, no palpable LNs, unilateral LNs macroscopically clear)
- Bilateral

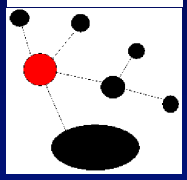
- Systematic (full) LND or Sentinel LND

Sentinel Lymph Node Dissection SLND)

Tumour drains into Lymph Nodes (LN) regionally. The first LN is the Sentinel Node (SN).

If SN negative > all other LN should be negative.

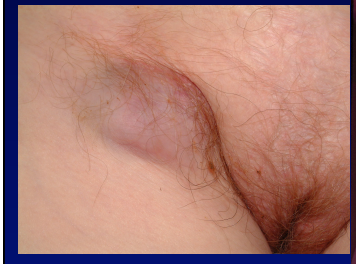


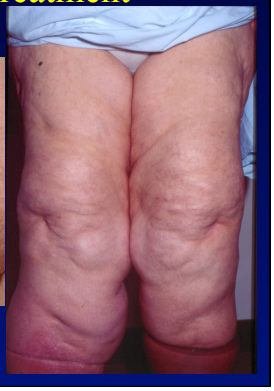


SLND: Experimental or Standard?

- Rationale: Reduce morbidity of LND (lymphoedema, seroma, infection)
- No Randomised Controlled Trial
  - Observational studies comparing systematic LND with SLND (Groins, GOG 173)
  - False negative rate "acceptable" (<3%)
    - If tumour diameter < 4 cm
  - Blue dye plus Immunoscintigraphy superior
  - How manage a patient with positive SLN?
- Learning curve (>20 cases)

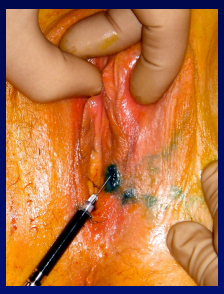
Side effects of treatment

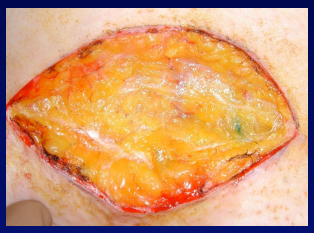




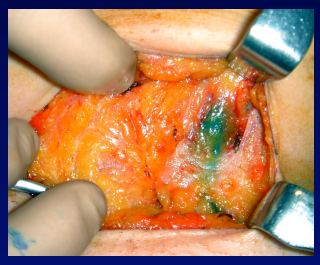
Lymphocyst and lymph oedema

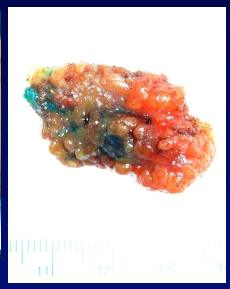
Sentinel Node



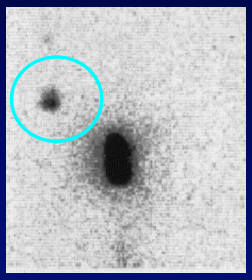


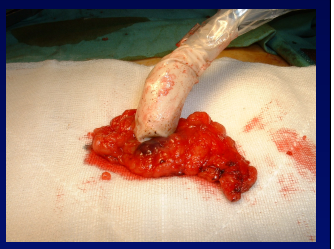
Sentinel Node





Lymphoscintigraphy





Radiotherapy

Locally

Postoperatively: If margins close or positive (and re-operation is not an option).

Instead of surgery: clitoris/anus; medically unfit

Groins & Pelvis

If groin lymph nodes positive.

Follow-Up

- No evidence suggesting improved survival with Follow-Up
- Recurrences (80%) develop within three (3) years from initial surgery
- Traditionally: Review patients every 3 months for 2 or 3 years, then every 6 months till year 5.

Survival Outcomes (at 5 years)

FIGO (2009)	Overall Survival	Disease-Free Survival
1A	92.4	89.7
1B	80.1	79
2	80	66.7
3A	64.6	63.8
3B	52.7	61.9
3C	17.4	18.2
4A	13.6	50
4B	0	0

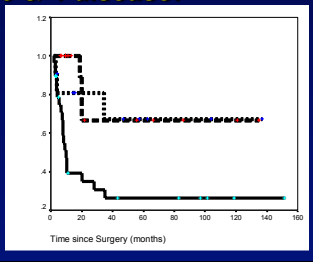
QLD Centre for Gynaecological Cancer

Prognosis

Stage 1 > 70% @5 yrs. ~ Groin node status

Patients with stage 3 & 4 disease:

- **Node negative**
- **1 microsc. LN**
- **2+ positive LN**



QLD Centre for Gyn Cancer

Quality of Life after Treatment

Lymphoedema, Itching

"Can't bend", "discomfort", feel narrow"

Need of information

"Partner should attend meetings with doctor"

Work-related problems (sitting, driving)

Sexual functioning

Janda et al.: Int J Gynecol Cancer 2004; 14: 1-7

Treatment of recurrence

- Localisation and Size of recurrence
  - Local recurrence (surgical*, ±XRT)
  - Prognosis intact
- Prognosis poor after groin and distant recurrence
  - Palliative management (chemo, XRT, symptomatic)

* Re-Excision, total pelvic exenteration (stoma for bowel, urinary conduit)

SurgicalPerformance.com

Lite users: Feedback on their own outcomes (Logbook).

"*Lite*" subscription is free.

SURGICAL PERFORMANCE