26
Vaginal Carcinoma

1. GROSS DESCRIPTION

Specimen

— vaginal smear/biopsy/partial/subtotal vaginectomy/radical vaginectomy (with hysterectomy, salpingo-oophorectomy and lymphadenectomy)/pelvic exenteration.
— weight (g) and size (cm), number of fragments.
— vaginal pathology may be asymptomatic or present with bleeding, discharge, dyspareunia, a feeling of discomfort or mass. Clinical examination and direct visualization by colposcopy can show dysplastic mucosal lesions (VAIN), warts, tumour and even changes related to diethylstilboestrol (DES) exposure (see below). Vaginal smear, punch or wedge biopsy allow a tissue diagnosis and the strong association with previous vulval, cervical and endometrial disease must be taken into account. Pelvic MRI is used to stage suspected tumour including the presence of any pelvic or inguinal lymphadenopathy, with the latter sometimes also amenable to investigation by FNA cytology. Surgery in the form of radical vaginectomy is used for localized, non-responsive or recurrent tumours, otherwise chemoradiation subject to assessment and discussion at a multidisciplinary meeting. Laser ablation and topical 5-fluorouracil are additional options for superficial mucosal wart or VAIN lesions. Pelvic exenteration is sometimes used for extensive local disease or post radiotherapy necrosis.

Tumour

Site

— anterior/posterior/lateral (right or left). Usually anterior or lateral and upper third (50–60%).

Size

— length × width × depth (cm) or maximum dimension (cm).

Appearance

— polypoid/verrucous/papillary/sessile/ulcerated/pigmented.
— exophytic lesions are commoner than endophytic and most are either nodular or ulcerative.

Edge
— circumscribed/irregular.

2. HISTOLOGICAL TYPE

Squamous cell carcinoma
— 90–95% of primary vaginal carcinomas.
— keratinizing/non-keratinizing.
— large cell/small cell.
— mainly moderately differentiated keratinizing.

variants:

— verrucous: exophytic, bland cytology with deep bulbous processes and a locally invasive pushing margin.
— warty (condylomatous): with focal invasion at the base.
— spindle cell: a cytokeratin positive sarcomatoid carcinoma.

Adenocarcinoma
— clear cell: PAS positive for glycogen, solid/tubules/papillae. From 1970 to 2000 most patients were 14–25 years with in utero exposure to DES. Following withdrawal of DES and as this cohort ages this diagnosis is decreasing. Non-DES cases in the older age group are rare, comprising clear/hobnail cells ± vaginal adenosis defined as the presence of any Müllerian type glandular epithelium, often endocervical, or tuboendometrial in character. Differential diagnosis is vaginal adenosis with microglandular hyperplasia and Arias-Stella reaction in pregnancy or hormone therapy. Prognosis is relatively good (80% 5-year survival) if small and superficial. Otherwise local recurrence and nodal metastases usually within 3 years but sometimes late after many years.
— endometrioid: possibly arising from previous endometriosis.
— mucinous: endocervical or intestinal in type and the former may be associated with adenosis (endocervicosis). Note that rarely primary vaginal intestinal-type adenoma of tubular/villous morphology can occur.
— mesonephric: deep in lateral vaginal walls arising from mesonephric remnants.

Adenosquamous carcinoma
— mixed differentiation of worse prognosis.

Adenoid cystic carcinoma
— indolent with late local recurrence and potential for metastases.

Adenoid basal carcinoma
— indolent.

Small cell carcinoma
— primary or secondary from cervix or lung.