ONE-PAGE CHEAT SHEET

Cancer basics and staging

The language of oncology on one page

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Free surgical teaching

BENIGN OR MALIGNANT

- Benign: slow, well defined, no invasion, never spreads
- Malignant: invades and can metastasise
- **Carcinoma** = epithelium (85–90%); **sarcoma** = connective tissue
- Melanoma, lymphoma and seminoma are malignant despite *-oma*

STEPS TO INVASION

- Hyperplasia → metaplasia → dysplasia → carcinoma in situ → invasive cancer
- **Carcinoma in situ** has not crossed the basement membrane
- Colorectal: APC → KRAS → SMAD4 → TP53

TNM STAGING

- **T** primary tumour, **N** regional nodes, **M** distant spread
- Prefixes: c clinical, p pathological, yp after neoadjuvant
- Stage I–IV; stage IV = distant metastasis
- **Grade** (G1–G3) is differentiation, not spread

MARGINS AND FITNESS

- **R0** no tumour at the margin; R1 microscopic; R2 visible
- ECOG 0 fully active · 1 light work · 2 self-caring, up over half the day · 3 in bed or chair over half the day · 4 bedbound
- Stage + grade + margin + fitness decide the plan

SPREAD

- Carcinoma: lymphatics first; sarcoma: blood
- GI cancers → liver via the portal vein
- Peritoneal (transcoelomic): stomach, ovary, colon
- **Sentinel node**: first draining node; biopsy spares node-negative patients a clearance

TREATMENT TIMING

- **Neoadjuvant**: before surgery (rectum, oesophagus, stomach, some breast)
- **Adjuvant**: after surgery (stage III colon, many breast)
- Curative or palliative: decide the intent first

EMERGENCIES

- **Neutropenic sepsis**: IV antibiotics within 1 hour
- **Cord compression**: whole-spine MRI, dexamethasone
- Tumour lysis: K, phosphate, urate up; calcium down
- SVC obstruction, hypercalcaemia, obstruction, bleeding

EXAM PEARLS

- Tumour markers monitor; they do not screen
- Testicular mass: inguinal orchidectomy, never scrotal biopsy
- Break bad news with SPIKES

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