

Male

Q- Classify Bladder Tumor



① → Benign :-

Transitional Papilloma

Exophytic Papilloma

Inverted papilloma

② → Inter-mediate :-

PUN → Papillary Urothelial neoplasm
of low malignant potential

③ → Malignant :-

Low grade Papillary cancer

High grade Papillary cancer

④ → Others :-

Mixed

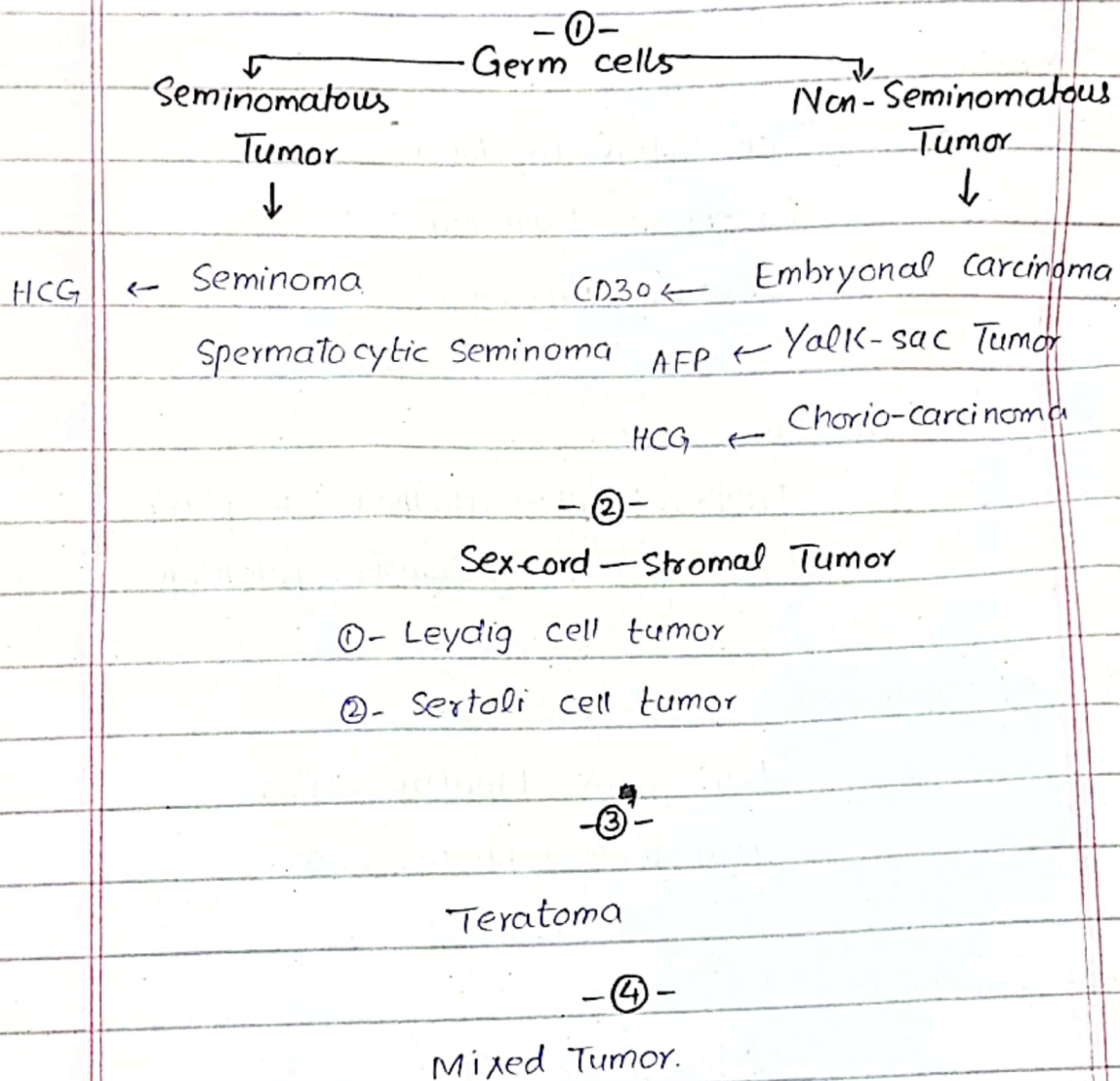
Adenocarcinoma

Small-cell Carcinoma

Sarcoma

Carcinoma In situ

Q. Classify Testicular Tumor :-



Stages :- (Testicular Tumor)

Stage I - Confined To Testis, epididymis, Spermatic Cord

Stage II - Spread Retro-peritoneal node below diaphragm.

Stage III - Outside spread of the retro-peritoneal nodes above diaphragm.

Q.

A man of 57 years who is cigarette smoker and has complaint of painless hematuria, Dysuria, urgency, and frequency of Urination. The Cystoscopy reveals papillomatous growth which was resected and microscopic examination show the cells in multiple layering with loss of polarity and have large hyper-chromatic. Pleomorphic nuclei with atypical mitosis and is invading the muscular layer.

* **Diagnosis :-**

- ✓ * Papillomatous growth
- ✓ * Large hyper-chromatic
- ✓ * Invading the muscular layer.

Papillary Urothelial Carcinoma.

* **Pathogenesis :-**

Acquired
↓

Genetic
↓

Cigarette Smoking

Deletion of 9p

Exposure of aryl-amines •

Mutation in FGFR₃

Schistoma hematoma

TP-53

Use of Analgesia

RB gene

Exposure of cyclo-phosphamide •

Radiation.

* **Grade :-**

① → Grade 1

② → Grade 2

③ → Grade 3

Q

* Pathogenesis of Semi-noma :-

Mutation in 12 Iso-chromosomes

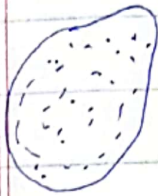
Mutation of CKIT

PLAP

* Morphology of semi-noma :-

Gross :-

Potato Tumor



Soft and demarcated grey-white

Coagulative Necrosis

Pale-Mass

Micro-scopic :-

Cell large, Round, Poly-hedral

Distinct Cell-membrane



Lobulated cell * ✓

Fibrous septa with Lymphocyte

Large Nucleus

Maximum - 2 prominent

2 Nucleoli

* Tumor-markers for Tumor-markers :-

HCG ✓

CD-30 ✓

HCG LDH

LDH ✓

CD-30 NANOG

AFP (Alpha-fetoprotein)

Oct 3/4

OCT 3/4

KIT

NANOG

KIT

B

* Risk-Factors of Seminoma:

Undescended Testes

Kline-felter syndrome

+ve Family History

Genetic Mutation - CKIT

C-KIT over-expression ✓
PLAP

* Types:

Classical Seminoma

Spermatocytic "

Anaplastic "

Q.

A child of 05 years old presented with a unilateral testicular Mass. Histopathology of biopsy revealed reticular network of medium sized cuboidal to flattened cells. Structures resembling primitive glomeruli were also noticed.

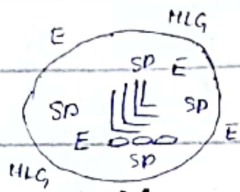
* Diagnosis :-

Yolk-sac tumor

* Value of serum marker in the context of Testicular tumor?

These markers are for diagnosing the testicular tumor. Every tumor has different markers which is helpful in diagnosing it. So, helping in starting the Rx and further procedure.

* Morphology :-



Gross

Microscopic

①- No capsulated

Lace-like pattern

②- Homogenous

Flattened cells

③- Yellow-white mucus appearance

Schiller-Duval Bodies

Eosinophil- within cytoplasm
outside cytoplasm

Hyaline like globules.

Q.

A young man presented with palpable mass in Abdomen and is found to have bilateral cryptochidism.

* Enlist the testicular tumor in this patient

Yolk-sac tumor

Embryonic carcinoma

Chorio-carcinoma.

* Features of Teratoma:

Heterogenous appearance, solid
Helter skelter collection of different cells.

Neural tissue.

Muscle bundles, Smooth bundles

Cluster of squamous epithelium

Bronchialar epithelium

Teeth, Nail

Bone, Cartilage

Gland, Stroma.

* Tumor markers of Teratoma.

α -Feto protein

LDH.

HCG, Normal.

* Congenital Abnormality associated \bar{e} cryptochidism:

Testicular dysgenesis Syndrome.

Q.

A man of 70 years has complaint of urgency nocturnal dysuria and difficulty in starting & stopping Urination. His PSA level is $\uparrow 14 \text{ mg/dl}$.

* Diagnosis :-

Adenocarcinoma of prostate ✓

* Microscopic :-

Hard gritty / Stony

Dark-Pink Cytoplasm

Nuclei Enlarge

Prominent Nucleoli

Ball like cluster of cancer cells

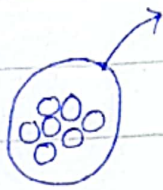
Small cell with single layer gland

Pleomorphic cells

Malignant gland

Yellow Nodule (posterior lobe)

↓ Secretion.



O - small cell

M

P

L

* Secondary changes \rightarrow UB and Kidney.

Glomeruli Damage ↓

GFR ↓

Q-

65 yrs old-man c/o mict urg, over-flow, incontinence and nocturia.

* Diagnosis:-

Benign Prostatic Hyper-pleisia

* Morphology:-

Transitional Zone

Median-lobe Hypertrophy

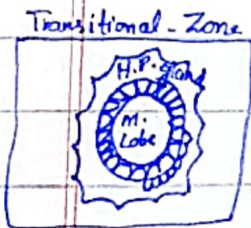
Hyper-plastic gland

Papillary Infolding

Glands has 02 layers → Inner columnar

→ Outer cuboidal.

Dilated large-cells.

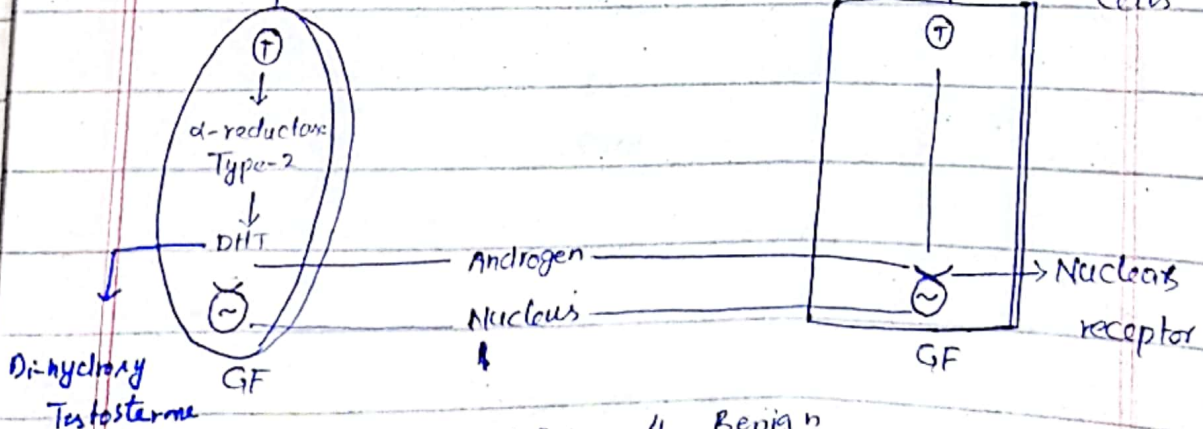


* Pathogenesis:-

Stromal cells.

Testosterone.

Epithelial cells



→ PSA = 4 Benign

→ PSP = 4-9 malignant.

0.

Gleason Scoring System :-

Adding of 2 number of grade is called gleason scoring system.

* Grade :-

- ① - Grade 1 - Well differentiated Tumor
- ② - Grade 2,3,4 - Moderate
- ③ - Grade 5 - Poor differentiated

* Pattern :-

- Primary :- More dominant pattern
- Secondary :- Moderate dominant pattern
- Tertiary :- Poor dominant pattern

E.g :-

Primary : More dominant pattern 2

Secondary : Moderate 3

Result :-

$$2 + 3 = 5 = \text{is the score}$$

If both pattern are same
Then add 01 pattern 02 times.

Result
 $1 + 1 = 2$ (score)

If 03 pattern Then
Add 02 most dominant one

3, 4, 1

$$3 + 4 = 7$$

Ans (Score)

Scoring :-

2-4 Well differentiated

4-6 Moderate differentiated

7-10 Poorly differentiated