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Benha University — Subject: General surgery

Faculty of Nursing — Time allowed: one hour.

The model Answer of Exam for 2nd year 2014/2015 (21/1/2015)

The model Answer: (40 marks.)

1-Discuss Indications & Complications of massive blood transfusion? (8 marks).

Indications: (3marks)

1-To restore blood volume e.g. Hemorrhage.

2-To supply deficient blood constituents:

****RBCs:*** Severe anemia: 1 unit packed RBCs raise HB by 1gm/dl.

****WBCs:*** Agranulocytosis & Leukopenia

****Platelets:*** Thrombocytopenia: FFP or platelets concentrate.

****Clotting factors:*** Coagulopathy & Hemophilia.

Complications of massive blood transfusion: (5marks)

1-Volume overload:

Cause: Large transfusion in risky-patients e.g. Extreme age & Cardiac

C/P: Acute pulmonary edema, Dyspnea, ↑HR & cyanosis, ↑CVP.

TTT:

*Stop blood.

*Sitting position

*O2 inhalation

*I.V. furosemide.

2-Hyperkalemia?

*K^+ leakage from the stored RBCs with oliguria → cardiac arrest in diastole.

*Treatment: insulin in glucose infusion → intracellular shift of k.

3-Hypocalcaemia (Citrate toxicity): by chelation of ionized Ca^+ by citrate.

Prophylaxis: 10ml Ca^+ gluconate 10% given for every liter of transfused blood.

4-Hypothermia: May lead to cardiac arrhythmia

Prophylaxis: Warming the blood before transfusion.

5-Coagulopathy: Especially factor V & VIII.

Prophylaxis: 2 units FFP / 8 unit stored blood.

6-Thrombocytopenia: Ttt by Platelets transfusion or FFP.

2-Discuss Investigations of a case of Grave's disease (1ry thyrotoxicosis)? (8 marks).

A-Thyroid function tests (Investigations for Endocrine state) (2.5marks)

I-Laboratory:

1-Estimation of serum total T_3, T_4 by radio-immunoassay: increased level

2-Estimation of serum TSH: increased level

II-Radiological:

1-Thyroid scan: The most diagnostic investigation.

*Used to;

1-Detect Single or multiple nodule (1ry: hot gland).

2-Evaluate Functional state of thyroid nodule & any suspected ectopic tissue.

B-Investigations for Physical character of the gland disease(2.5marks)

I-Laboratory:

1-Anti-thyroid antibodies: in (Grave's disease)

2-Tumor Markers:

***Thyroglobulin**: to exclude malignancy.

II-Radiological:

A-Plain X-ray neck & chest: to detect;

1-Retrosternal extension or Calcification,

2-Deviation of trachea.

B-Thyroid U/S:

*Guide for FNAC.

*Cystic and solid nodules (Single or Multiple).

C-CT or MRI neck: To assess operability & L.Ns involvement.

D-PET: (18-Deoxy Fluoro Glucose Positron emission tomography).

III-Instrumental "Biopsy":

1-FNAC:

2-Open biopsy: Least biopsy in thyroid diseases is "Hemithyroidectomy".

C-Pre-operative investigations(1.5marks)

1-Routine: as usual.

2-ECG; is a must for any age? To exclude heart failure.

3-Indirect laryngoscope: For vocal cords examination (of medicolegal importance).

D-Metastatic work-up (1.5marks)

*Neck: X-ray for medullary carcinoma (peripheral calcifications).
*Chest: X-ray, CT & Bronchoscope.
*Abdomen: U/S & CT.
*Bone scan.

3-Define the following: (8 marks).

3.A. Trauma Triage: Identification of patients who are going to die from their injuries and those will get benefit from a trauma center. (2 marks)

3.B. Carbuncle: Infective gangrene of the skin & subcutaneous tissue. (2 marks)

3.C. Mammography: Soft tissues X-ray of the breast. (2 marks)

3.D. Cretinism: Hypothyroidism in infants. (2 marks)

4- True (√) or False (×): (8 marks).

4.A. (X) (2 marks)

4.B. (√) (2 marks)

4.C. (X) (2 marks)

4.D. (√) (2 marks)

5- Choose the correct answer: (8 marks).

5.A. 1-Reactionary (2 marks)

5.B. 3-Keloid. (2 marks)

5.C. 1-Don't remove (2 marks)

5.D. 2-Furuncles (boils) (2 marks)

Good Luck