PEDIATRICS AIIMS PYQ

Medsynapse by Dr. Nikita

How is under-nutrition defined?

acute chronic
WHA t
↓ stunting
↓ nutritional wasting

underweight
↓
wt for age ↓

nutrn
undernourished
↓
(wt for ht)

a) Weight for age < –2 SD → underwt
b) Weight for height < –2 SD

SAM → WH → (-3SD
WHO → WHAt

c) Weight for age < –3 SD
d) Weight for height < –3 SD

severe → < -3SD

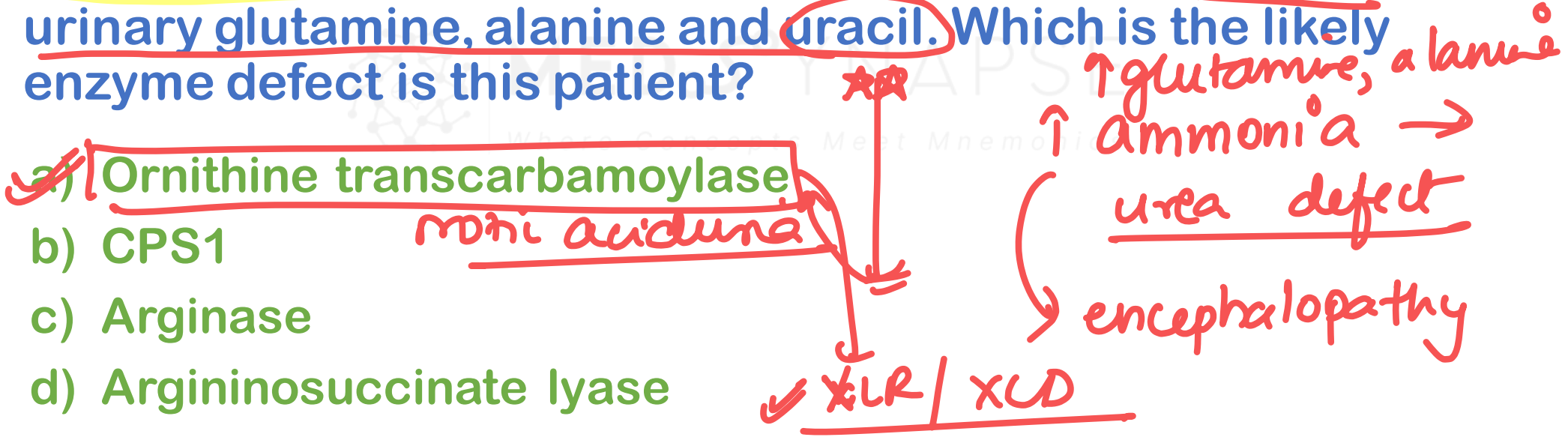
A 1-month-old child presented with conjugated bilirubinemia and intrahepatic cholestasis. On Liver biopsy staining with PAS red colored granules were seen inside the hepatocytes. Probable diagnosis is:

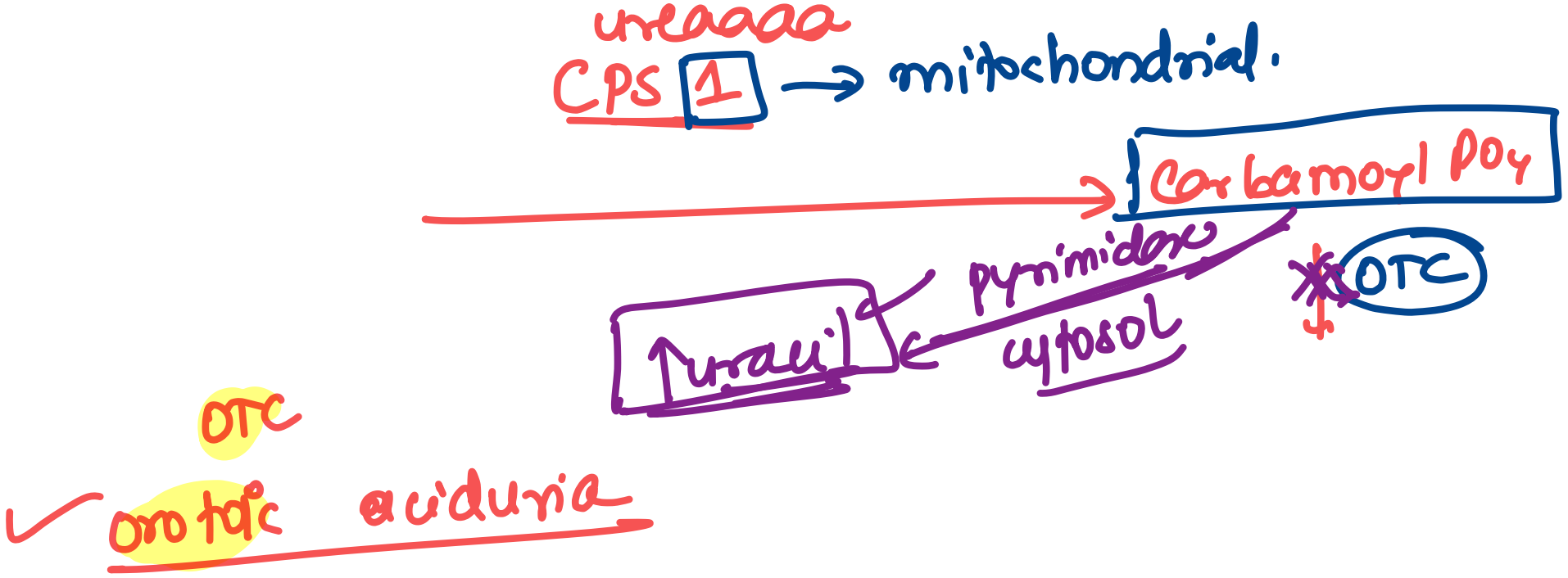
a) Congenital hepatic fibrosis
b) Wilson's disease
* c) Alpha-1 antitrypsin deficiency
d) Hemochromatosis

Liver → PAS +
- diastase resistant
- chrom. 14
- lung → panacinar emphysema.

An infant at 7 months of age presented with history of vomiting and failure to thrive. Patient improved with administration of intravenous glucose and came out of coma within 24 hours. After one month he returned with similar complaints. On evaluation he is found to have raised blood ammonia and No ketones. Also, he has high urinary glutamine, alanine and uracil. Which is the likely enzyme defect is this patient?

a) Ornithine transcarbamoylase
b) CPS1
c) Arginase
d) Argininosuccinate lyase




urea
CPS 1
mitochondrial.
Carbamoyl PO4
pyrimidine
Uracil
cytosol
OTC
OTC
orotic aciduria

In a child, surgery was done for biliary stricture with hepatojejunal anastomosis. Postoperative bilirubin level after 2 weeks was 6 mg/dL from a preoperative level 12mg/dL. The reason for this could be:

12 → 6mg↑

a) Normal lowering of bilirubin takes time
b) Anastomotic stricture
c) Delta bilirubin → conj bilirubin bound to albumin (ud.) ★★
d) Mistake in lab technique

∴ not excreted in urine
∴ slow clearing

A 2-year-old child with fever and barking cough for last 2 days presented to the pediatric emergency at 2.30 am. On examination, respiratory rate is 36/ min, temperature of 39 °C and stridor heard only on crying. No other abnormality is found. What is the next best step in management?

mild

- croup / LTB
- airway cough (+)
- viral
- No antibiotics
- supportive
  - dexa
  - epinph

a) High-dose dexamethasone → all severity
b) Racemic epinephrine nebulization → mod to severe
c) Reassurance ✗
d) Intravenous antibiotics ✗

xray → steeple sign

Milk is deficient in:

Bone DK.
vit D/K
vit B12

a. Iron and vitamin C
b. Iron and vitamin A
c. Phosphorus and vitamin A
d. Saturated fats

cow milk → iron ↓
goat milk - iron ↑

All of these are criteria for severe acute malnutrition in a 6-month-old child except:

a. Mid-upper arm circumference
b. Symmetrical edema
c. Weight for height
d. Height for age

A 3.5 kg male infant born at term after an uncomplicated pregnancy and delivery develops respiratory distress shortly after birth and requires mechanical ventilation. The chest radiograph reveals a normal cardiothymic silhouette but a diffuse ground glass appearance to the lung fields. Surfactant replacement fails to improve gas exchange. Over the first week life, the hypoxemia worsens. Results of routing culture and echocardiographic findings are negative. A term female sibling died at 1 month of age with respiratory distress. Which of the following is the most likely diagnosis?

a) Neonatal pulmonary alveolar proteinosis
b) Meconium aspiration
c) Total anomalous pulmonary venous return
d) Disseminated herpes simplex infection

In a child with tetralogy of Fallot with fever and diarrhea, which of the following is the surest sign of a cyanotic spell?

tet spell. → hypovolemia / ↑ crying

cyanotic (all TS)

cyanotic → ↓ pulm blood flow → pulm constrn → RVOT ↑ resist

a. Hepatomegaly
b. S3 gallop rhythm
c. Arterial oxygen saturation of less than 75%
d. Absence of murmur ✓

PS → pulm stenosis ∵ no flow across pulm valve.

Rx → squatting → ↑ PVR → ↑ LV
knee chest posn

A child who was normal at birth develops chronic liver failure and muscle weakness at 3 months of age. On investigations, serum glucose is low, along with ketoacidosis and decreased pH. ALT and AST are raised. Blood lactate and uric acid levels are normal. Intravenous glucagon given after meals raises the blood glucose levels, but does not raise glucose when given after an overnight fast. Liver biopsy shows increased glycogen in liver. Which is the enzyme likely to be defective in this child?

↑ in von Gierke (wong)

a. Glucose-6-phosphatase → von Gierke A B C D

b. Muscle phosphorylase

c. Branching enzyme

d. Debranching enzyme → Cori's / limit dextrinosis
↳ liver
· muscle - heart

★ glucagon

→ von gierk
- fed — abn
- fasting — abn.

→ cori → liver
- N
- abn

A 5 years old child presented with continuous fever and features of sepsis with a BP of 90/60 mm Hg, Pulse rate ~~144~~/min and respiratory rate of 30/min. What is the initial fluid of choice for management?

a. 10 mL/kg of 10% dextrose ✗
b. 10 mL/kg of hydroxyethyl starch
c. 20 mL/kg of 0.45% normal saline ✗
d. 20 mL/kg of 0.9% normal saline ✓

- septic shock / hypovolemic
↓
Rx → volume
(NS)
isotonic
0.9% NS.

Q SAM ē shock ⟶

↓

(Dextrose + RL)

glucose ↳ electrolytes, volume.

Q only shock → NS

Burns → RL.