



كل المعلومات الموجوده بالاسلايد داخله في امتحان اللاب العملي



ممكن تجيب كمان ال morphology of
the egg or adult بالسؤال كمعلومات او
كيس واحنا نختار الشكل المناسب للمطلوب

Respiratory Module Lab 2

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Paragonimus westermani adult



Shape: coffee bean.

Size: 12 × 6 mm

Color: pinkish - brown .

Suckers: The oral and ventral suckers (2) are equal in size.

Short oesophagus and two long sinous intestinal caeca.

Two lobulated testes in the posterior 1/4.

One branched ovary in front of testes.

Coiled rosette shaped uterus.

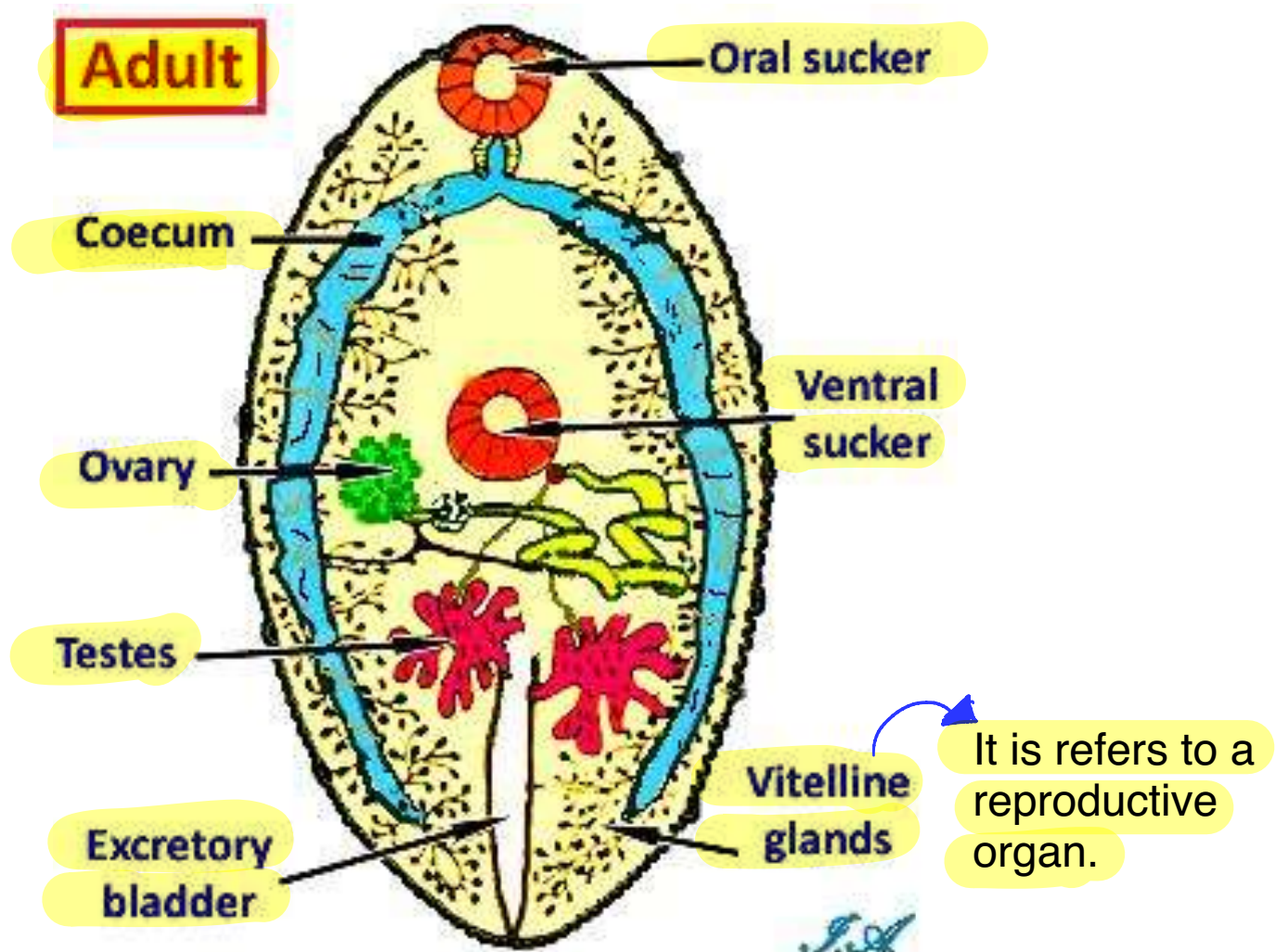


D.S

بنعرفها من خلال ال coecum بكون tortuous



Paragonimus westermani adult





***Paragonimus westermani* Egg**



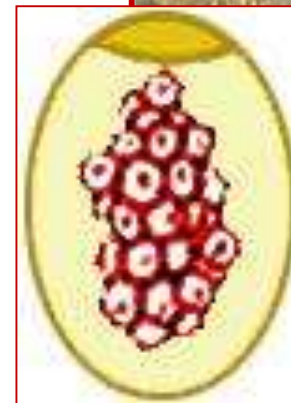
Size : 90 x 50 μ m.

Shape : Oval.

Shell : Thick shell with operculum .

Color : Golden brown.

Content : Immature ovum.



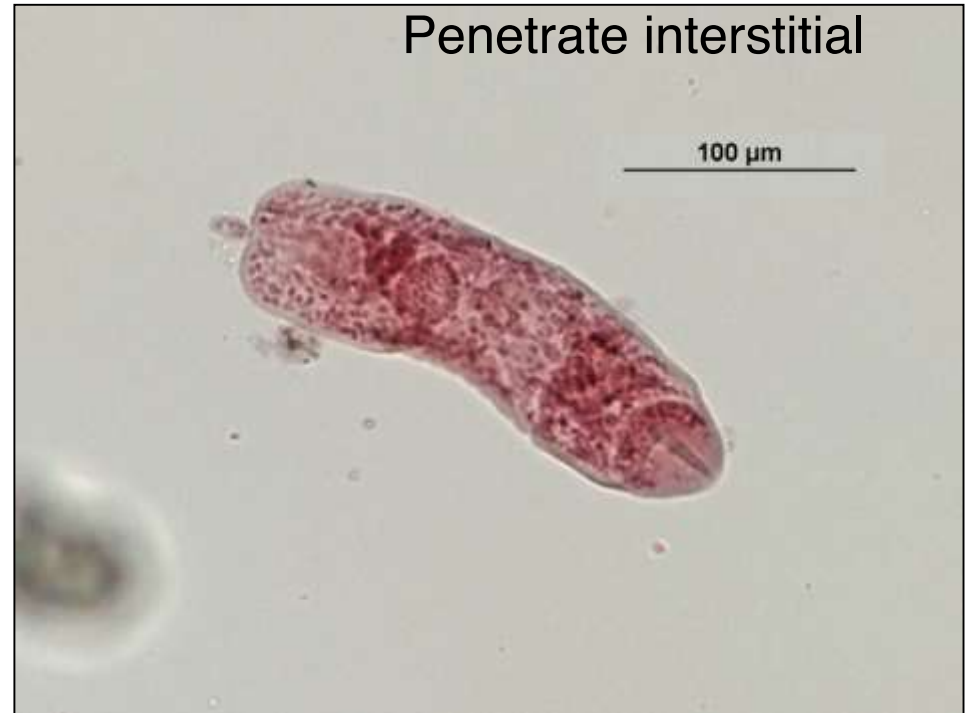
D.S



Paragonimus westermani cercaria



- **Oval in shape.**
- **Has small knob like tail (micro-cercous cercaria)**
- **The body covered with spine.**
- **Has oral & ventral suckers.**
- **Has 7 pairs of penetration glands.**





Encysted metacercaria of *Paragonimus* (I.S)



- Spherical in shape.
- The cercaria loses its tail & secrete a thick cyst wall.
- Present in the viscera & muscles of crabs & cray fish.
- The I.S to Man, fish eating animals & carnivorous.

ممکن تجیب سؤال
? I.S of the paragonimus
بتكون حاطه الصور والحل اعتماداً ع الشكل



fortuous بنصدر نعرفها كمانه من فلاله
نوعه Adult .



Echinococcus granulosus adult



➤ **Size: 3-6 mm.**

➤ **Morphology:**

➤ **Scolex.**

➤ **3 segments:**

➤ **Immature segment.**

➤ **Mature segment (longer than broad).**

➤ **Gravid segment (longer than broad).**

* يتكون بالحواله .





Echinococcus granulosus scolex



- Globular in shape.
- Has 4 suckers. بس 4 سونہ 2 یں دیکھو
- Has rostellum with 2 rows of hooks.



Echinococcus granulosus Egg



(I.S to man & herbivorous).

Size: 30-40 um.

Shape: Spherical. Rounded

Shell: Thick, radially striated
Outer

embryophore.

Color: brownish.

Content: Mature hexacanth
embryo (onchosphere)





Unilocular hydatid cyst

Outer + No nucleus

Fibrous adventitial layer

Laminated layer

Germinal layer

Inner + Nucleus

Daughter cysts

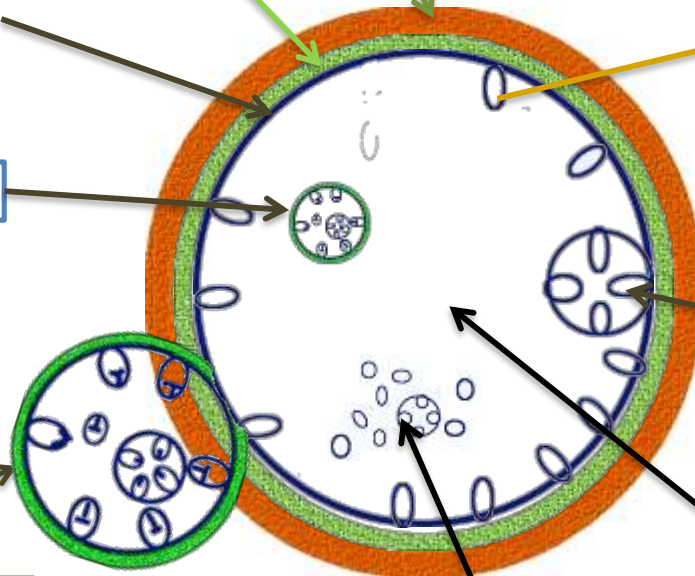
Protoscolices

Brood capsules & Protoscolices

Exogenous daughter cysts

Hydatid fluid

Hydatid sand



A: Fibrous adventitial layer

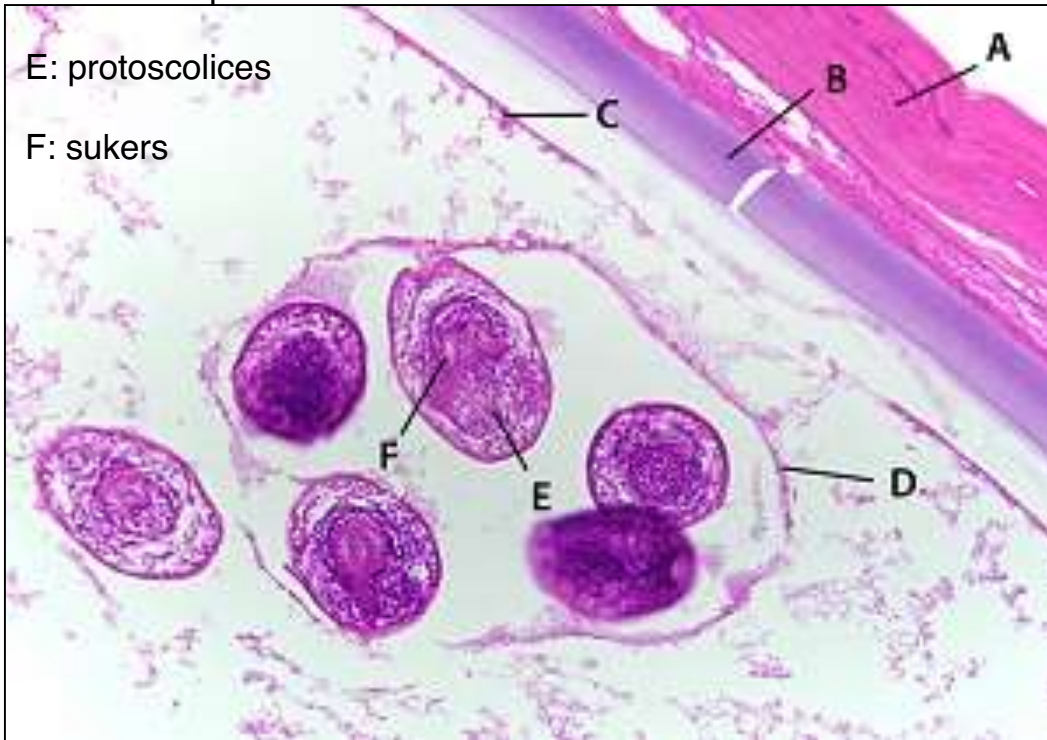
B: Laminated layer

C: Germinal layer

D: Brood capsules

E: protoscolices

F: suckers



2 layer ← Daughter cysts } D
 one layer ← Protoscolices }
 عن طريق layers
 بنسبتهم

Thank
You

