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Neglected Tropical Diseases

Mary Ann McDowell
Sima Rafati *Editors*

Neglected Tropical Diseases – Middle East and North Africa

 Springer



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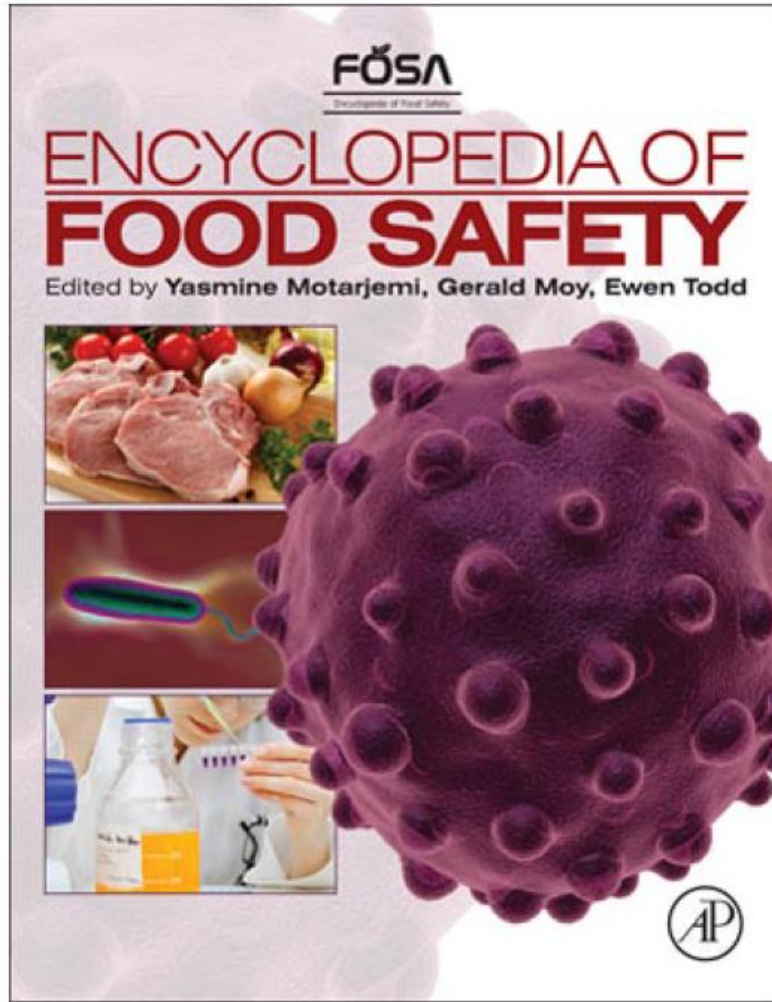
Fasciolosis in the MENA Region

Mohammad Bagher Rokni, Wael M. Lotfy, Kayhan Ashrafi,
and K. Darwin Murrell

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HELMINTH-TREMATODE

Fasciola hepatica and *Fasciola gigantica*

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Glossary

Contamination The introduction or occurrence of a contaminant in the food or food environment.

Control measure Any action and activity that can be used to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

Food Any substance, whether processed, semi-processed, or raw, which is intended for human consumption, including drink, chewing gum, and any substance which has been used in the manufacture, preparation, or treatment of 'food'; it does not including cosmetics, tobacco, or

substances used only as drugs. (In the context of this topic-level contribution, drinking water is food).

Foodborne disease Any disease of an infectious or toxin nature caused by or thought to be caused by consumption of food or water.

Food safety Assurance that food will not cause harm to the consumer when it is prepared or eaten according to its intended use.

Risk A function of the probability of an adverse health effect and the severity of that effect, consequential to hazard(s) in food.

Fasciola hepatica (Liver Fluke)

فاسیولوزیس

نام بیماری: فاسیولوزیس Fasciolosis؛ دیستومیازیس

Distomiasis؛ آلودگی فلوک کبدی Liver fluke infection

◆ میزبان نهایی: زئونوز، مشترک بین انسان □ دام، خوک، گراز، اسب، الاغ

◆ میزبان واسط: حلزون لیمنه ترونکاتولا Lymnaea truncatula

محل زندگی

* مجاری صفراوی کبد

* کیسه صفرا

* موارد اکتوپیک : تیروئید ، طحال ، پوست ، پانکراس،

CUTANEOUS FASCIOLIASIS: A CASE REPORT IN VIETNAM



FIGURE 1. Cutaneous migratory track in the patient.

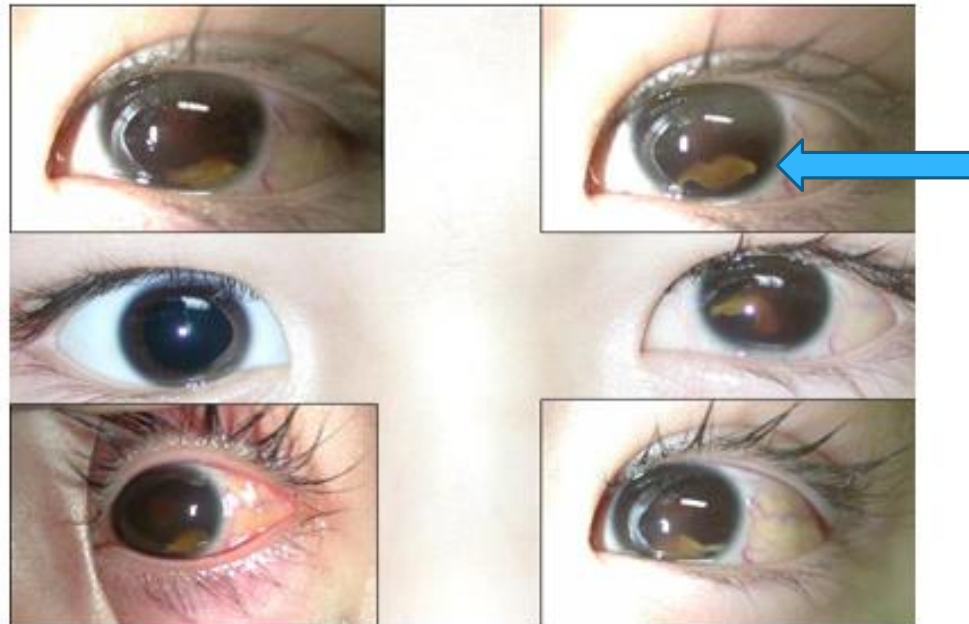


FIGURE 2. Juvenile *Fasciola* removed from the skin of the patient and stained with acid carmine.

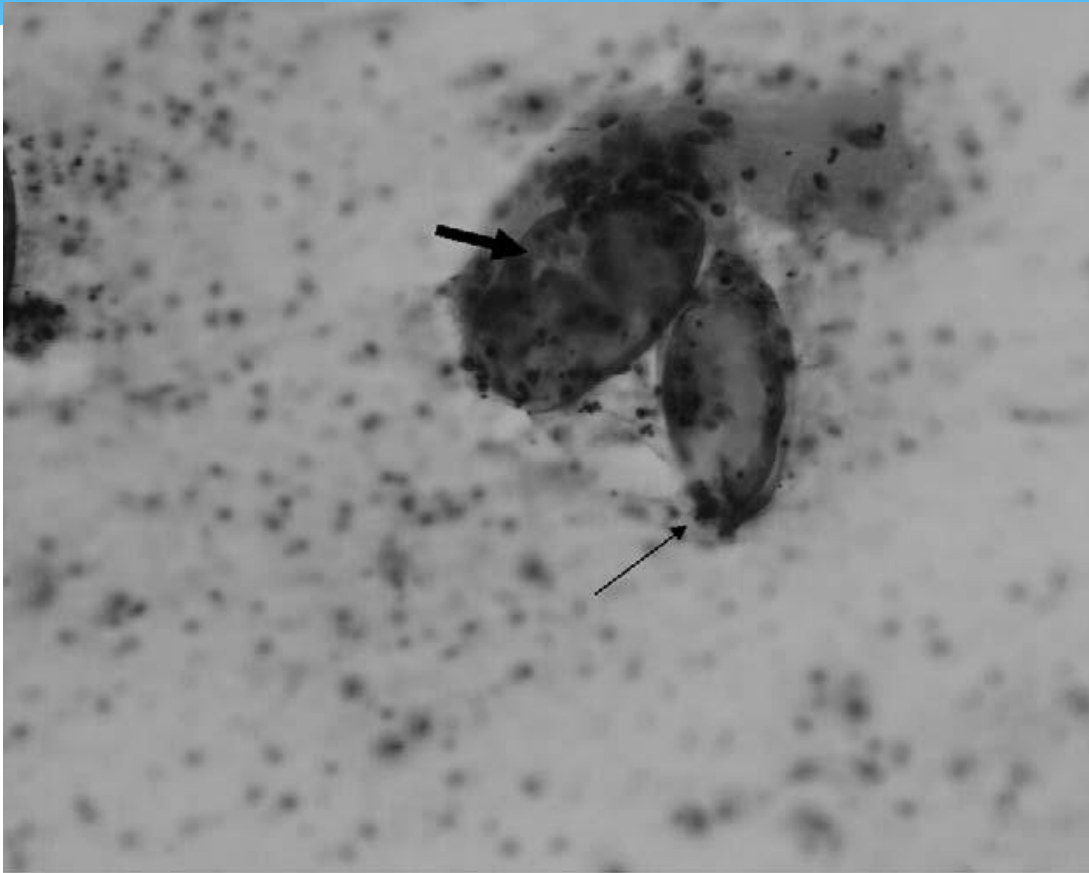
Picture of The Month

Fasciola hepatica in the left eye of a 6 year old boy from Tashkent, Uzbekistan, causing monocular blindness (Photograph by Dr Rogers Neil) (Dec 2009)

You can watch the previous posts of Picture of the month in the Pictures parts of the website at the upperside of the left column.

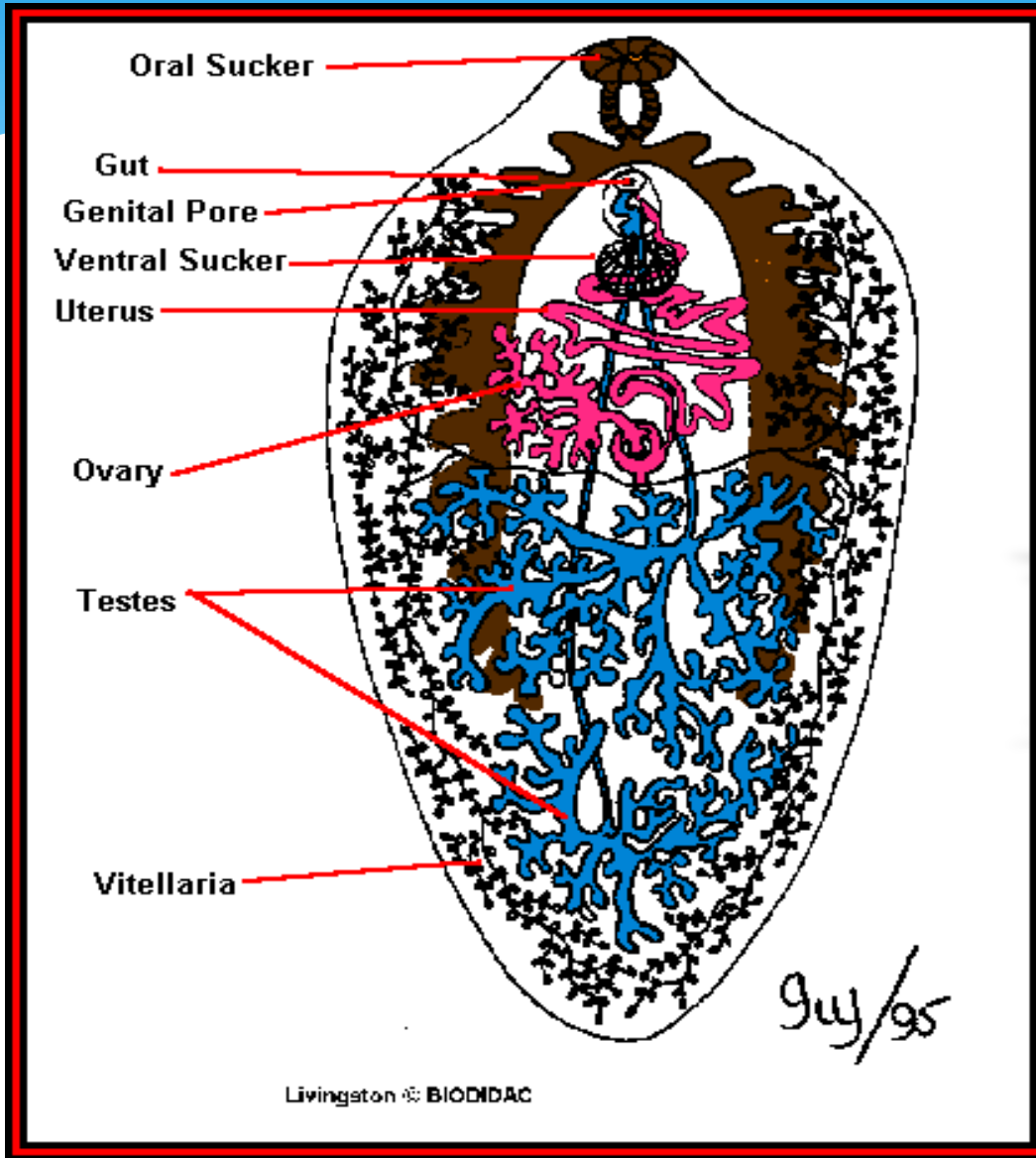


Fasciolosis of the breast in a male patient



Fine needle aspiration cytology of the mass showing the ova (thin arrow) of the *Fasciola* spp.

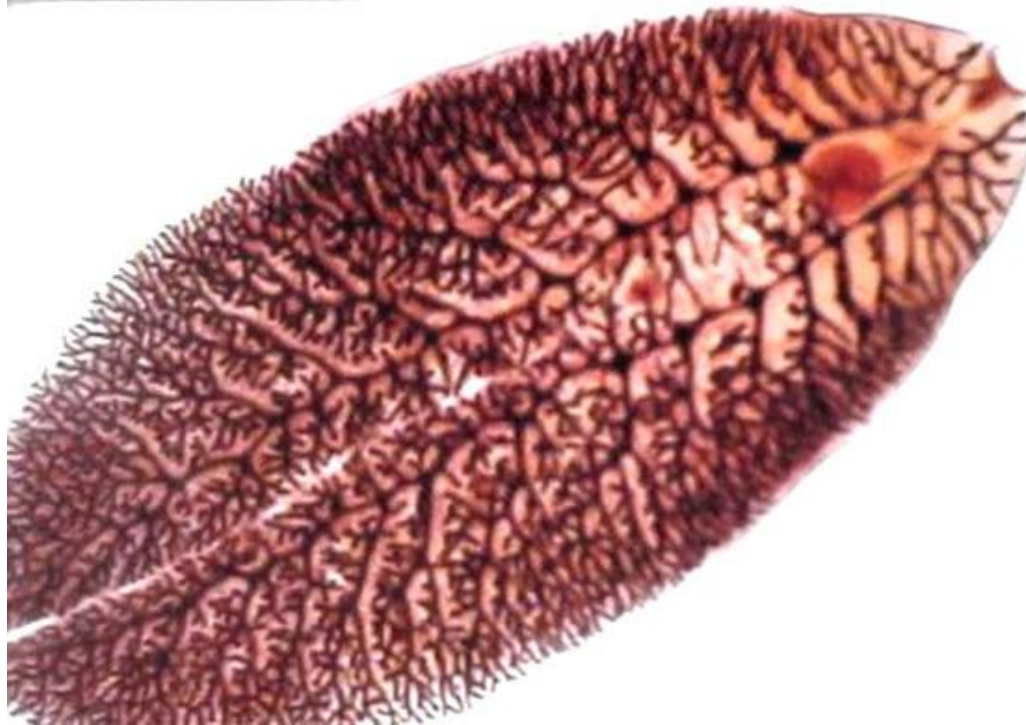
مورفولوجی فاسیولا ہیاتیکا



ہرمافرودیت

ہرمافرودیت

Fascioloides magna adult





سير تكاملي

evolution cycle))

5 Cattle ingest cysts, which develop into liver flukes and migrate to the liver in 8 to 10 weeks.

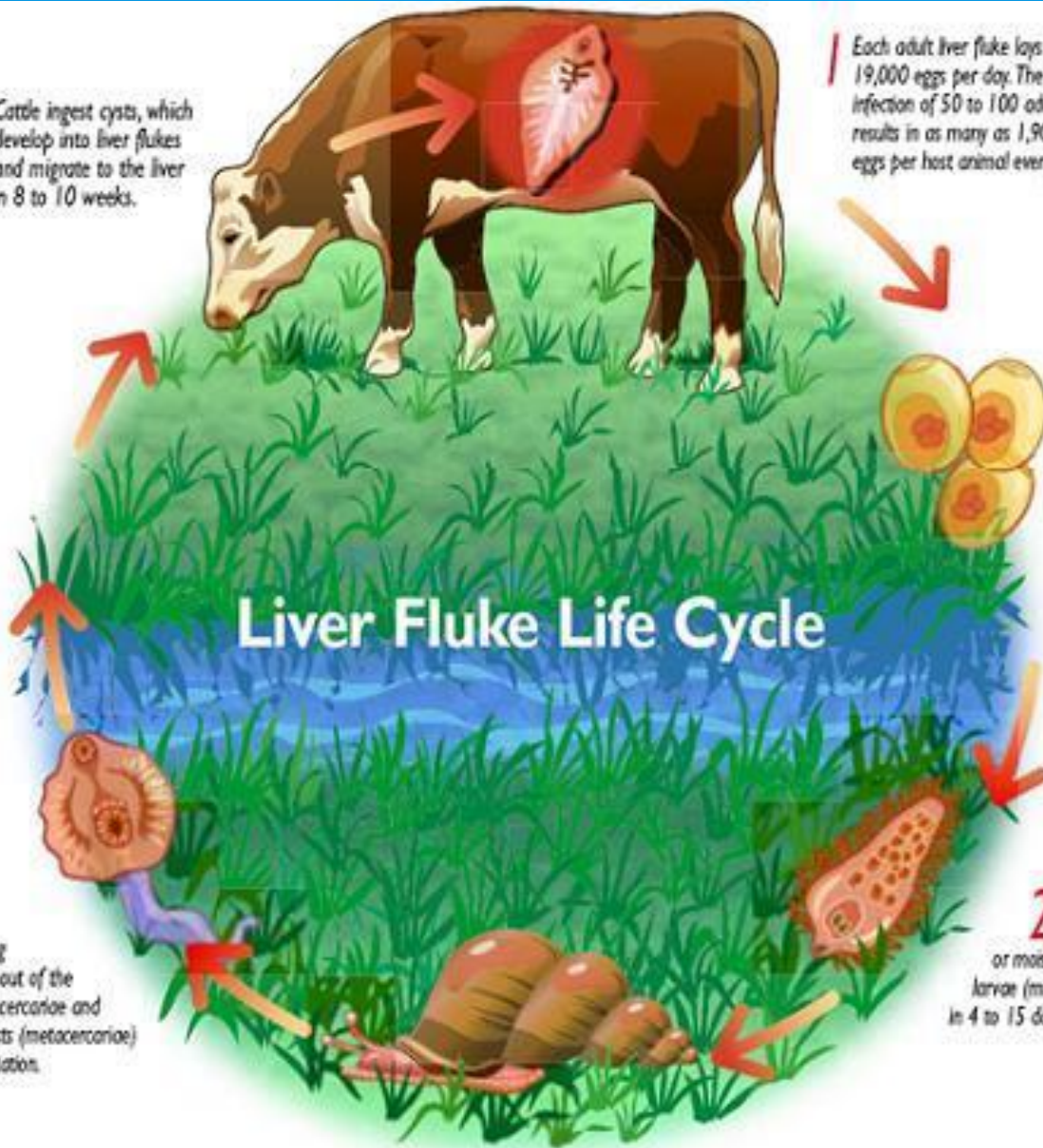
1 Each adult liver fluke lays as many as 19,000 eggs per day. The average infection of 50 to 100 adult flukes results in as many as 1,900,000 eggs per host animal every day!

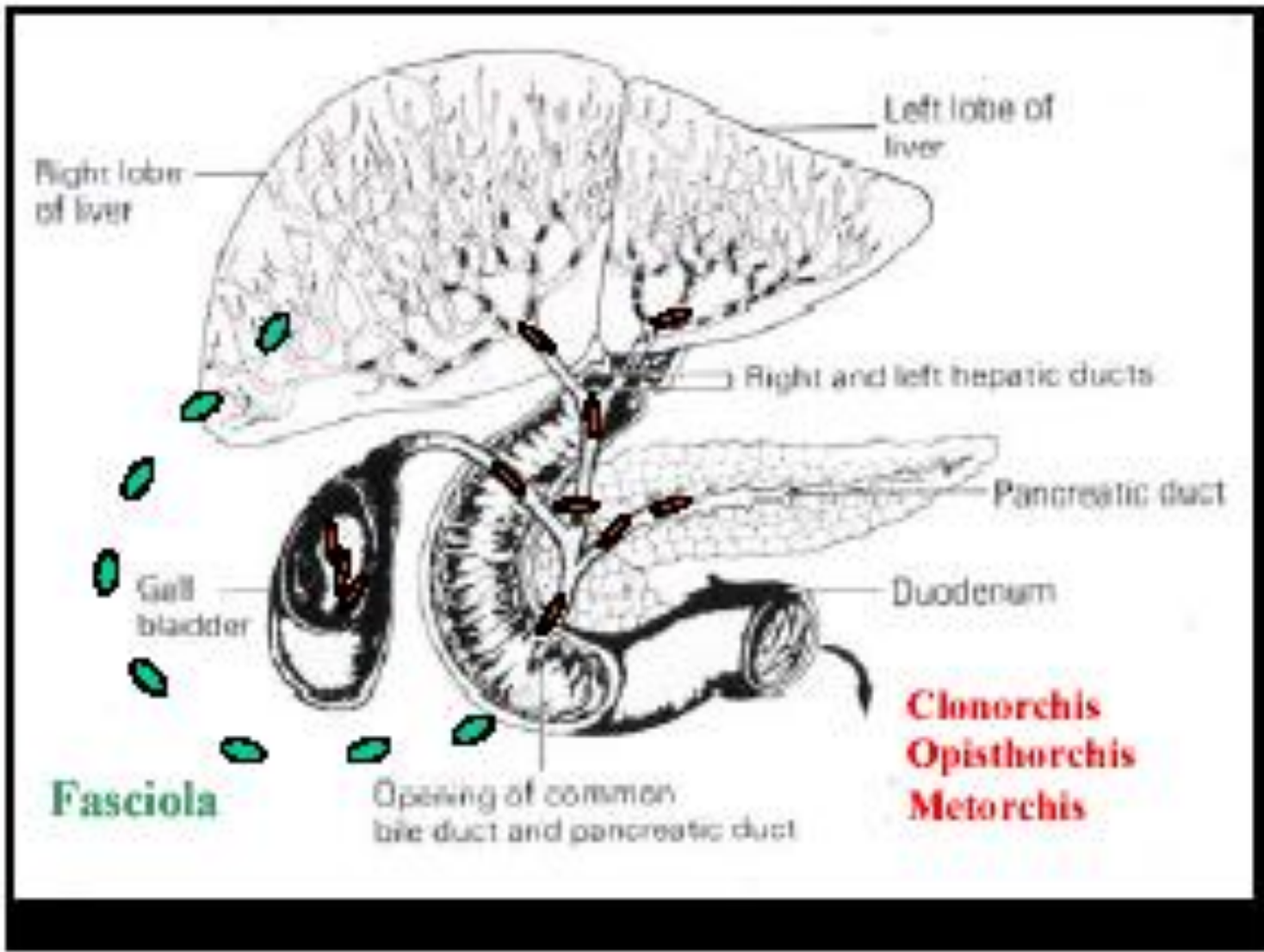
Liver Fluke Life Cycle

4 Offspring migrate out of the snail as cercariae and form cysts (metacercariae) on vegetation.

2 Contact with water or moisture helps the larvae (miracidia) hatch in 4 to 15 days.

3 Larvae infect snails and produce several hundred offspring.





منبع آلودگی

1. سبزیجات
2. آب
3. جویدن گیاهان مخدر
4. نوشیدنی های گیاهی

اپیدمیولوژی

شترمتی (۱۳۹۰)

Fascioliasis in Iran



- * فاسیولا روزانه 19000 تخم می گذارد.
- * تخم می تواند تا یکسال زنده باقی بماند و در شرایط خوب 4 تا 15 روز میراسیدیوم خارج می گردد.
- * تخم از طریق مجاری صفراوی وارد کیسه صفرا می گردد و از آنجا به مدفوع و چون تخلیه کیسه صفرا متناوب است نبود تخم انگل در مدفوع نمی تواند دلیل بر عدم ابتلا به فاسیولا باشد
- * حلزون یا تخم را می خورد یا میراسیدیوم وارد بدنش می گردد..

* کشتارگاه بندرانزلي نقش اصلي را در آلودگي ايفا ميکند با
پراکندن تخم در خروجي تصفيه خانه + استفاده از پودر حاصل
از لجن باقيمانده در تصفيه خانه به عنوان کود+ استفاده از
مدفوع دام هاي موجود در کشتارگاه بعنوان کود

URBAN FASCIOLIASIS



**Transmitting
plants in city
markets**



Fasciola gigantica



Fasciola gigantica

میزبان نهایی : انسان - دام

* میزبان واسط : حلزون لیمنه ژدروزیانا

* انتقال با خوردن گیاهان آبی آلوده به متاسرکر