**TOXOPLASMOSIS**

Human acquisition of Infection occurs :

oöcyst-contaminated soil, salads and vegetables, water.

 or by the ingestion or tasting raw or undercooked meats containing tissue cysts.

or blood transfusion and organ transplantation (very rare)

In developed countries, toxoplasmosis is the most common protozoal infection

In HIV infection, toxoplasmosis is an important opportunistic infection with considerable morbidity and mortality.

Most primary infections are subclinical.

**Clinical features**

1-In most immunocompetent individuals, the infection goes unnoticed.

2. In approximately 10% of patients it causes a self-limiting illness.

The most common presenting feature is painless lymphadenopathy. In particular, the cervical nodes .

Most patients have no systemic symptoms, but Some complain of malaise, fever, fatigue, muscle pain, sore throat and headache

3-Very infrequently, patients may develop encephalitis, myocarditis, polymyositis, pneumonitis or hepatitis.

**Retinochoroiditis** is nearly always the result of congenital infection but has also been reported in acquired disease

**Congenital toxoplasmosis**

females infected 6 months before conception have no risk of fetal transmission.

Acute toxoplasmosis, affects 0.3-1% of pregnant women, with an approximately 60% transmission rate.

Congenital disease affects approximately 40% of infected fetuses

fetal infections are subclinical at birth but

 **long-term sequelae include :**

 Retinochoroiditis.

 Microcephaly

 Hydrocephalus

**Investigations**

1-In **immunocompromised** patients, the diagnosis often requiresdirect **detection** of parasites.

**2-Serology** is used in **immunocompetent** individuals.

a. The Sabin-Feldman dye test 🡪 **detects IgG** antibody. **Recent** infection is indicated by a increase in titre

b. Toxoplasma-specific IgM 🡪 **Negative IgM antibodies virtually rule out acute infection**

3. the presence of high-avidity IgG antibodies excludes infection acquired in the preceding 3-4 months.

4. organisms in a lymph node biopsy can be sought by staining sections histochemically with T. gondii antiserum, or by the use of PCR to detect Toxoplasma-specific DNA

**Management**

**In immunocompetent subjects uncomplicated toxoplasmosis is self-limiting**

**Treatment with pyrimethamine, sulfadiazine and folinic acid is for cases of severe or progressive disease, and for infection in immunocompromised patients.**

**In a pregnant woman With recent infection, spiramycin given until term.**

**fetal infection treatment with sulfadiazine and pyrimethamine plus calcium folinate is recommended**

**How likely is a baby to contract congenital toxoplasmosis?**

1-Infection shortly before conception carries a 1% risk of transmission to the fetus, but a high risk of miscarriage if the fetus does become infected.

2.The first trimester

 There is a 15% chance of the baby having congenital toxoplasmosis .

 3.The second trimester

The figure rises to a 25%. nearly 10 % will be severe

 4.The third trimester

There is a 65% chance of the baby contracting congenital toxoplasmosis, , and none will be severe .

To avoid toxoplasma during pregnancy women who are seronegative, should not contract the disease during pregnancy.

**Giardiasis**

Infection with Giardia intestinalis, It particularly affects children, tourists and immunosuppressed individuals

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| **Clinical features**there is diarrhoea, abdominal pain, weakness, anorexia, nausea and vomiting.  there may be abdominal distension and tenderness.**Management**Treatment is with a single dose of tinidazole or metronidazole | **INVESTIGATIONS**1-Stools should be examined for cysts.2-Duodenal or jejunal aspiration by endoscopy 3-The 'string test' may be used.4-A number of stool antigen detection tests are available.5-On jejunal biopsy fresh mucus examination  |