Glandular fever syndromes:

These includes infectious mononucleosis, acute cytomegalovirus and acquired toxoplasmosis.

The common features of these infections are:

1-Rarely spread between infected cases.

2- Most infections are subclinical.

3- Chronic infection may occur.

4- Activation of latent infection may occur.

5- Occasionally transmitted through blood or leucocyte transfusion.

6- Atypical lymphocyte appear during acute infection.

7- Cytomegalovirus and toxoplasma can cause intrauterine infection and congenital disease.

Infectious mononucleosis

- Learning objectives
-
- Epidemiology-1
- Clinical features-2
- Laboratory tests-3

Infectious mononucleosis (IM):

Epidemiology:

1- The disease is caused by Epstein –Barr virus which is a herpes virus.

2- In developing countries it is a subclinical childhood infection while in upper socioeconomic group, primary infection may be delayed until adolescence or early adult life.

3- 50% of infections result in typical IM.

4- Virus is usually acquired from asymptomatic excretors.

5- The main source of transmission is the mouth, pharynx and urogenital tract.

Clinical features:

1- Lymphadenopathy especially posterior cervical.

2- Pharangitis.

3- Fever.

4- Splenomegaly.

5- Palatal petechiae.

6- Periorbital oedema.

7- Hepatitis.

8- Non specific skin rash.

Laboratory tests;

1- Atypical lymphocyte (more than 20% of the peripheral lymphocyte).

2- Heterophil antibody in the serum example paul-Bunnel or monospot test.

3- Specific EBV serology (immune fluorescence).

Cytomegalovirus infection

- Learning objectives
- Clinical features of acquired and gestational -1 CMV
- Investigations-2

Clinical features:

1- Hepatosplenomegaly might be seen just like IM .

2- Lymphadenopathy,Pharangitis and tonsilitis are less common.

3- Jaundice is uncommon.

Unusual complications include neurological involvement,- 4 haemolytic anaemia, pericardtis, pneuonitis and arthropathy

Investigations:

1- Atypical lymphocytosis is not as prominent as in IM and heterophil antibody test are negative.

2- Liver function test are often abnormal with raised alkaline phosphatase.

3- Serological diagnosis (CMV specific IgM antibody).

Gestational CMV infection:

1- Most cases are subclinical.

2-Suspension arise by detection of heterophil antibody negative glandular fever in pregnancy.

3- Congenital infection can occur at any stage of gestation.

4-The risk of spread to the fetus is around 40%.

5-The most important sequelae is the CNS involvement of the fetus.

Toxoplasmosis

- Learning objectives
- Epidemiology-1
- Clinical features-2
- Laboratory tests-3
- Management-4

Acquired toxoplasmosis:

Epidemiology:

Toxoplasma gondii is an intracellular parasite the sexual phase of the parasites life cycle occur in the small intestinal epithelium of the domestic cast, oocyte shead in cat feaces and are spread to intermediat hosts, including humans. Oocyte may survive in moist conditions for weeks or months.

Oocyte undergo asexual multiplication to form a cyst in the tissues which persist for the life-time of the host.

Clinical features:

1- The peak incidence is between 25-35 years.

2-Painless enlargement of the lymph nodes is the most common features.

3-The spleen is seldom palpable.

4- Most patients have no systemic symptoms. But some complain of malaise, fatigue, muscle pain, fever, headache and sore throat.

5- Complete resolution usually occurs within a few months.

6- Other site other than lymph nodes seldom involved such as, brain, heart, lung, liver or skeletal muscle.

Retinochoroiditis is the result of congenital infection-7

Laboratory tests:

1- The heterophil antibody test is negative and atypical lymphocyte may be scanty or abscent.

2- The sabin-feldman dye test detect IgG Ab.

3- The IgM antibody by indirect immunoflurescence or Eliza is useful in confirming acute infection.

4- Lymph nose biopsy can detect the toxoplasma organism through antiserum or PCR.

Management:

1- Usually toxoplasmosis is self limiting.

2- Pyrimethamine and sulfadiazine is reserved for rare cases of severe or progressive disease and for infection in immune compromised patient.

3- A few individual develop the chronic fatigue syndrome after acute toxoplasmosis but there is no evidence that their immune response is other than normal and antimicrobial therapy is unnecessary.

4- In pregnant women with recent infection, spiramycin (3g daily in divided doses until term).

Congenital toxoplasmosis:

1- It is acute in nature, mostly subclinical, affect 0.3-1% of pregnancies with a 60% transmission to the fetus.

2- The incidence of congenital disease (40%) is greatest in the first trimester but may extend into the third trimester.

3- Many fetal infection are subclinical at birth but long-term sequelae occur in almost all cases.

4- The main features are retinochoroiditis, microcephaly and hydrocephalus.

5- Routine use of toxoplasma screen and treatment in pregnancy are being debated.