# SEROLOGY (INFECTIOUS DISEASES)

Even though a tube of clotted blood is indicated with most tests, a battery of tests can be done on one clotted sample and not a separate sample/test.

Anti-streptolycin O antibodies

Anti-DNAse-B antibodies

Brucella antibodies

Schistosoma antibodies (Bilharzia)

Coxiella burnetii antibodies

Cysticercosis antibodies

Echinococcus antibodies

Entamoeba antibodies

Histoplasma antibodies

Legionella antibodies

Leptospira antibodies

Mycoplasma pneumoniae antibodies

Rickettsia antibodies

Toxocara antibodies

Toxoplasma antibodies (TBH: TORCH screen - Only Toxoplasma test is done at Serology; Rubella, CMV and Herpes tests are done at the Virology laboratory in the Medical School)

Widal test

Yersinia antibodies

All abovementioned serology tests:

Serum: 10 ml clotted blood in sterile tube A battery of tests can be done on one clotted sample.

Syphilis serology (RPR; FTA; VDRL)

### **RPR**

• Serum: 10ml clotted blood in sterile tube

#### FTA

• Serum: 10ml clotted blood in sterile tube Cerebrospinal fluid: 2ml in sterile tube

#### **VDRL**

• Cerebrospinal fluid: 2ml in sterile tube

## Chlamydia antigen detection

• Cervical or urethral swabs must be sent in transport media (TBH: swabs and transport media obtainable from the laboratory)

# Pneumocystis jeroveci antigen detection

- ♠ Broncho-alveolar lavage specimen or tracheal aspirate Sputum is only recommended if above mentioned specimens cannot be obtained. Send an early-morning specimen in a sterile container (saliva is not acceptable). At TBH only respiratory specimens <6 hours old and received on weekdays before 13h00 will be processed. A similar sample should be sent to cytology for staining.
- Do not request Bacteriological culture and Pneumocystis serological

detection on the same specimen.

# **IMMUNOLOGY**

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#### **AUTO-ANTIBODY TESTS:**

Collagen screen (stomach, liver and kidney tissue substrate): Antimitochondrial; Anti-smooth muscle; Anti-parietal cell and Antinuclear antigen

Anti-nuclear antigen (ANA)

Anti-DNA

Anti-extractable nuclear antigen

Anti-Glomerular basement membrane

Anti-Ro

Anti-La

Anti-SCL-70 (Scleroderma)

Anti-Jo1

Thyroid antibodies (Anti-microsomal; Anti-thyroglobulin)

Anti-cardiolipin

ANCA (Anti-cytoplasmic antibodies)

LKM-antibodies(Liver Kidney Microsomes)

Rheumatoid factor

Anti-Coeliac disease/Anti- Gliadin antibodies

Anti -Gad/IA2 antibodies.

## Auto-antibody tests:

Serum: 5 ml clotted blood in sterile tube. A battery of tests can be done on one clotted sample.

TISSUE	DISEASE	AUTO-ANTIBODY
Thyroid	Hypothyroidism	Anti-microsomal
		Anti-thyroglobulin
Gastric	Pernicious anemia	Anti-parietal cell
Liver	Autoimmune hepatitis	Anti-smooth muscle
	Primary biliary cirrhosis	Anti-mitochondrial
Neuromuscular	Myastenia gravis	Anti-acetylcholine receptor
		(sent to GSH)
Kidney	Goodpasture's syndrome	Anti-Glomerular basement
		membrane
Haematological	Antiphospholipid	Anti-cardiolipin

Connective tissue diseases	Rheumatoid arthritis SLE Polydermatomyositis Scleroderma Mixed Connective tissue disease Sjogren's syndrome	Rheumatoid factor; Anti- ANA; Anti-DNA; Anti-ENA (Anti-RNP; Anti- Sm; Anti-Ro; Anti-La and Anti-Scl 70)
	Vasculitis	Anti-neutrophil cytoplasmic membrane (ANCA)

# Circulating immune complexes

• Serum: 5 ml clotted blood in sterile tube

#### **COMPLEMENT STUDIES:**

C3; C4

• Serum: 5 ml clotted blood in sterile tube

## Total complement

• Serum: 5 ml clotted blood in sterile tube **on ice** 

# C3 nephritic factor

• Serum: 5 ml clotted blood in sterile tube

At TBH: Test is only performed when C3 is reduced

## C1-esterase inhibitor (C1 inactivator)

• Serum: 5 ml clotted blood in sterile tube

At TBH: test is only performed when C4 is reduced

# Other complement fractions

• Serum: 5 ml clotted blood in sterile tube **on ice** 

At TBH: Test is only performed when total complement is absent or markedly reduced

## CRP (C reactive protein)

• Serum: clotted blood in sterile tube

Adults: 5ml Children: 1.5ml

## Fungal antibodies

• Serum: 5 ml clotted blood

# Avian antibodies

• Serum: 5 ml clotted blood

# IqG subclasses

• Serum: 5 ml clotted blood

#### Quantitative CD4 and CD8 counts and ratio

• 5ml EDTA blood. Keep blood at all times at room temperature.

Example 2 Lymphocyte subsets on bronchial lavages - only by prior arrangement with laboratory, at TBH: extension 5564 or 5278

Test only done on weekdays Monday to Friday.

Result also available in absolute count:-No need to request FBC and DIFF first.

## HLA B27 marker

Keep blood at all times at room temperature.

Lymphocyte function tests (T- and B-cell activity)

Arrange with laboratory, At TBH: extension 5564 or 5278

• 20ml EDTA blood

Ensure that patient is not on antibiotic treatment as this will affect the result of this test.

Allow for a seven day delay before result becomes available.

# Neutrophil function tests

- Arrange with laboratory, At TBH: extension 5564 or 5278
- ♦ 20ml EDTA blood + 5ml clotted blood

LAD(Leucocyte adhesion receptors)

Burst test(Oxidative burst test)

Fast Immune assays(Lymphocyte transformation flowcytometric assays)