Methods in Parasitology

6. Sedimentation und SAF*-Ether Concentration

(*SAF: Sodium acetate-acetic acid-formalin solution)

Swiss Tropical Institute, Basel

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6.0 Sedimentation & SAF-Ether Concentration

Contents

- 6.1 Materials
- 6.2 Sedimentation of stool sample
- 6.8 SAF-Ether concentration

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6.1 Sedimentation

Materials:

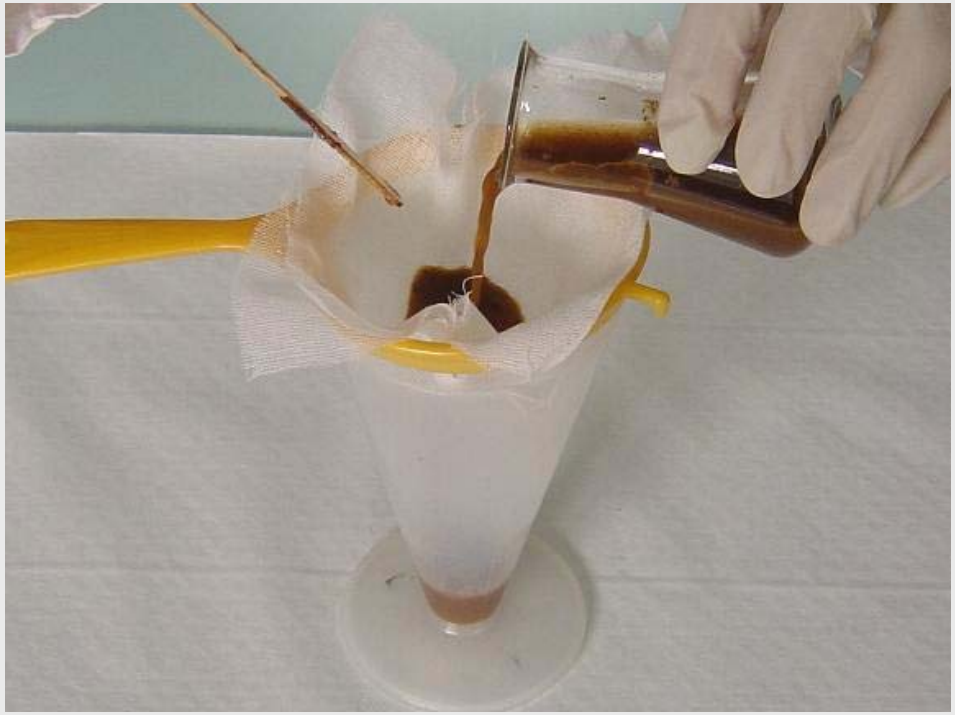
- NaCl 0.9%
- SAF-solution
- Ether
- Centrifugation tubes
- Sieve
- Funnel/gauze
- Rubber stopper
- Pasteur pipette with rubber bulbs
- Wooden spatula
- Beaker (50ml)
- Conical glass / plastic bottles
- Wire mesh
- Microscope slides, cover slips
- Gloves

6.2 Sedimentation

Carefully mix fresh stool with saline in a glass beaker

6.3 Sedimentation

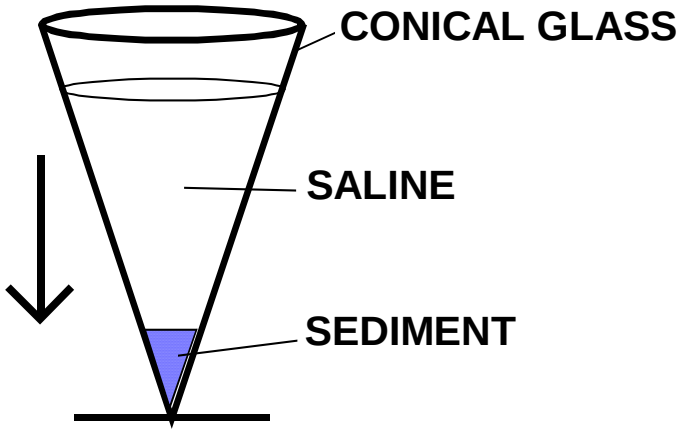
Filter stool suspension through a sieve with two layers of gauze into a conical glass



6.4 Sedimentation

Leave 1 hour for sedimentation

Before After

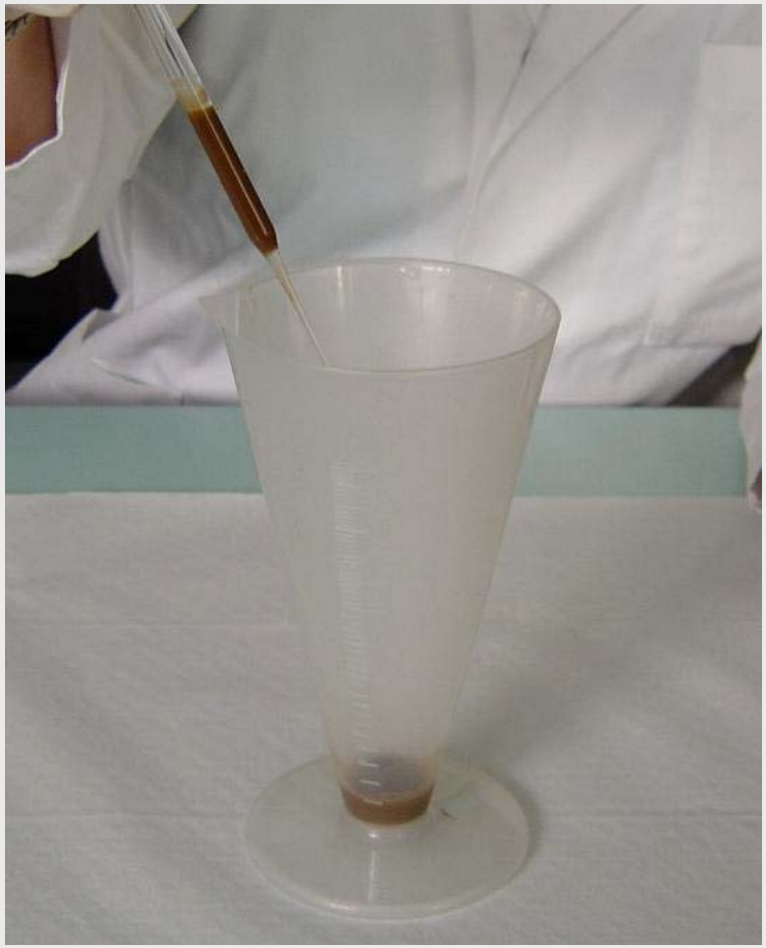


6.5 Sedimentation

Carefully pour off the supernatant fluid until the sediment is visible

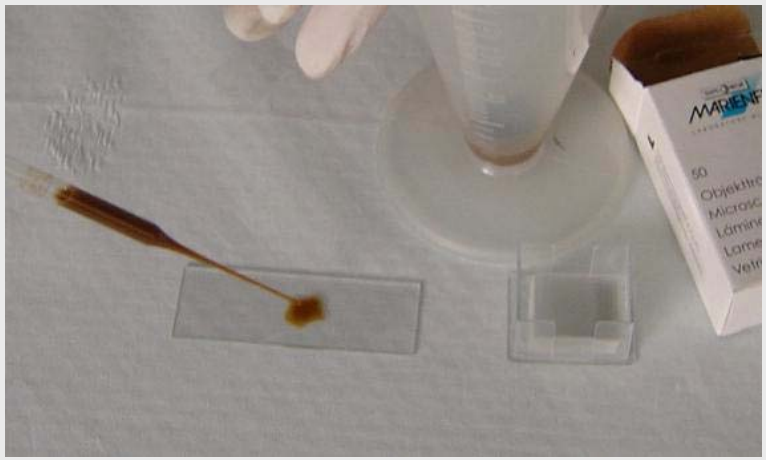
6.6 Sedimentation

Take up part of the sediment using a Pasteur pipette.
Leave to stand for 2 – 3 minutes (Mini-sedimentation in the pipette)

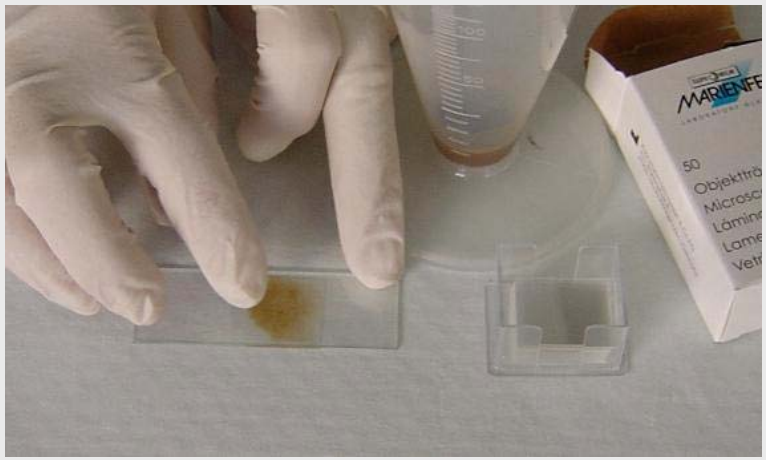


6.7 Sedimentation

Prepare 3 slides for microscopy

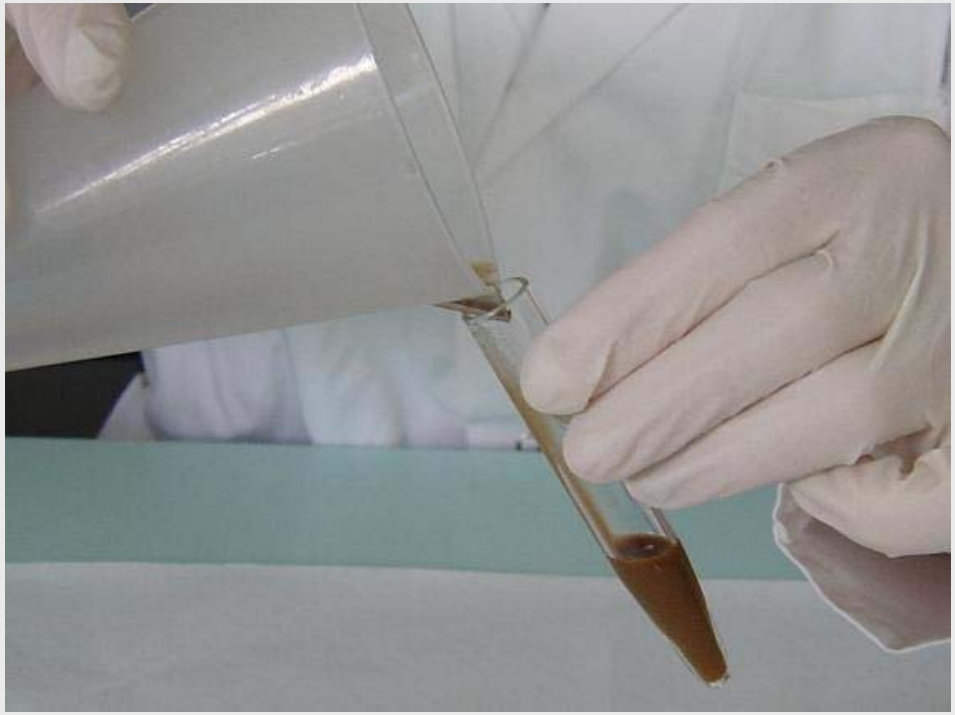


Search for helminth eggs and larvae



6.8 SAF-Ether Concentration

Pour the rest of the sediment into a conical centrifugation tube

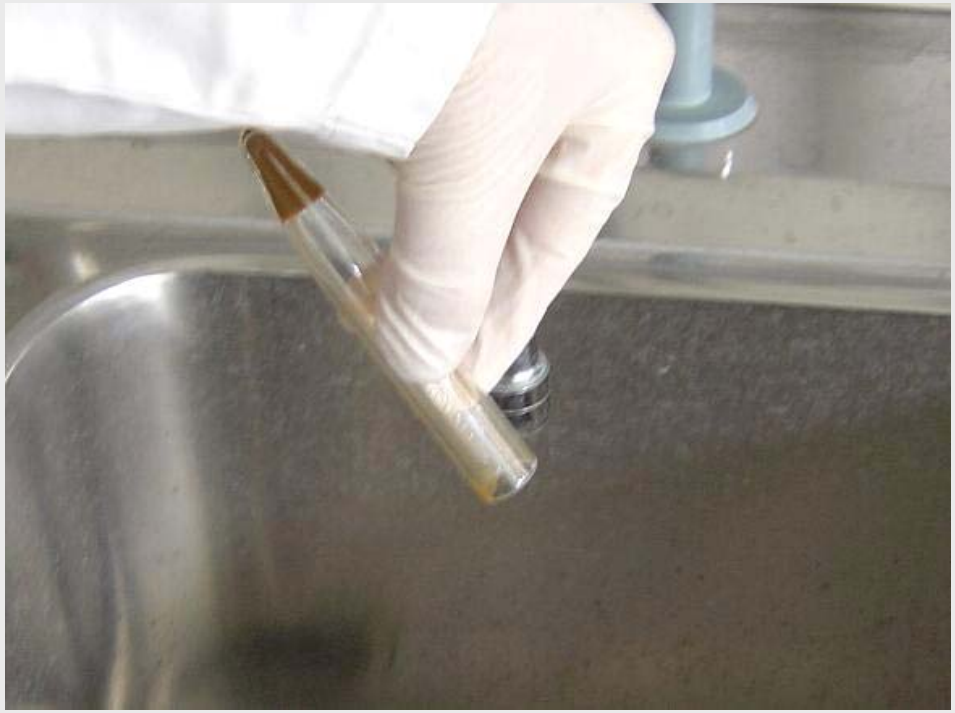


6.9 SAF-Ether Concentration

Centrifuge for 5 min
at 2000 rpm

6.10 SAF-Ether Concentration

Decant supernatant



6.11 SAF-Ether Concentration

Fill the tube with

7 ml of SAF solution and

3 ml ether

(Caution:
inflammable!)

6.12 SAF-Ether Concentration

Mix with wooden stick

6.13 SAF-Ether Concentration

Close tube with rubber stopper

and

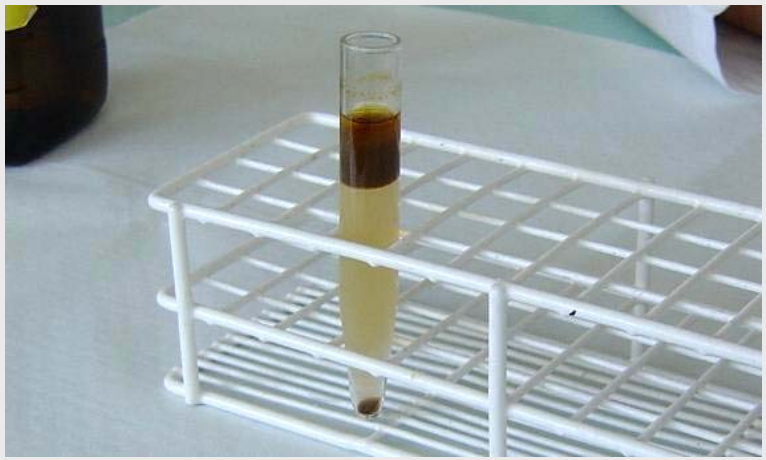
agitate vigorously

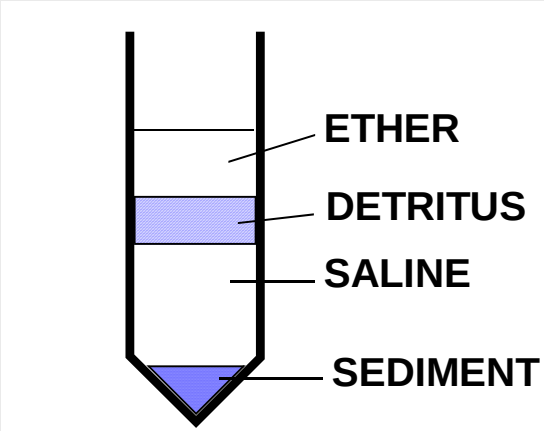
6.14 SAF-Ether Concentration

Centrifuge for 5
minutes at 2000 rpm.

6.15 SAF-Ether Concentration

After centrifugation:
4 layers can be
observed





6.16 SAF-Ether Concentration

Remove all layers except the sediment using a pipette on a pump
(Alternatively: loosen the detritus with a wooden stick and decant)

6.17 SAF-Ether Concentration

Mix sediment and place a drop on a microscope slide. Add cover slip

Examine the whole sediment