Identification of E.coli

Specimen: stool sample, rectal swabs, washing material from mucus membrans, vomiting masses, (for the detection of infectious focuses/areas we use some products, washing material from hands and other)

I Stage

1. We take sterile pipet and place 3-5 g of material into the tube, with Nacl and glycerol (3 ml.glycerol + 7ml NaCl) and prepare emulgator;
2. 1-2 drops of emulgator is transfered on petri plate and is distributed using strike plate method, for isolation of pure cultures (inoculation is done on 2-3 plates);
3. Place into thermostate and incubate on 37C for 18-24 hours.

II Stage

1. Take plates from thermostate, inspect colonies, Lactose positive E.coli on the "Endo" media produce red colonies with metalic shine, if E.coli is lactose negative, colonies are pink (5%).
2. Suspected colonies we take with loop and stain with Gram staining method; choose 10 colonies, with metal shine, and test it on slide using agglutination testwith OB anti serum: take 2 slides, drop 10 drops of polivalent serum, into each drop we put portion of colony (another portion is needed for isolation of pure culture). If positive results, other portion of colony is transferred on slant agar and incubated in thermostate for 18-24 hours.

III Stage

1. Inspect colonies. Pure culture is tested again/repeatedly - using slide agglutination test, with polyvalent OB serum;
2. If positive results, test with slide agglutination test, with typo-specific monovalent OB serum;
3. Next, open agglutination test, in test tubes with OB serum;
4. Identification of pure culture by biochemical traits - inoculation in "Hiss' Coloured Row" and by API system.
5. Antibiotic suseptibility test;
6. Detection of phage specificity.