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# Doctor tests/Bedside microbiology testing

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# What is a doctor test?

- A test performed bedside
  - By the managing physician or nurse
    - Should be simple to perform
    - And to interpret
    - Sensitive
    - Specific
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# Performed bedside

- GAS test
  - Urine dip sticks
  - Heterophile antibodies for EBV
  - Direct microscopy malaria
  - Malaria antigen tests
  - Gram stains e.g. CSF
  - BV test for bact. vaginosis
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# Not performed bedside

- Pneumococcal antigen in urine
  - Legionella antigen in urine
  - Influenza antigen from nasopharynx
  - RS virus ag test from nasopharynx
  - Acid fast stain for mycobacteria
  - Helicobacter tests
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# Usefulness?

## Help

- Strep A
- Legionella ag
- Malaria microscopy
- Helicobacter test
- Acid fast stain for mycob.

## Help???

- Influenza ag
- Pneumococcal ag
- Heterophile ab EBV

## Don't help

- Urine dip sticks
  - Gram stain CSF
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# Challenging situations

- Seriously ill septic patients
    - Rapid identification of causative microorganism
    - Rapid identification of antibiotic resistance
    - "The golden hour".... "Time is organ"....
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# Challenging situations

- Increasing resistance
    - Increase in VRE, MRSA, resist. G- enteric bacteria
    - The policies for empiric antibiotics may not be adequate – severe consequences in seriously ill patients
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# Challenging situations

- **Confinement of infections**
    - Influenza and other highly contagious infections
    - Bacteria with resistance mechanisms which need to be confined
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# Doctor tests – the way to go?

- Test development is mainly based on molecular biology



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# Doctor tests – not the way to go?

- Rapid testing performed in the clinical microbiology laboratory
  
  - Problems to overcome
    - Around the clock service
      - 168 hours a week – microbiology service during 53 hours today
    - Logistics
      - Rapid transport of samples and rapid turn-around time in the laboratory
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