**Method**

Identification of chromogenic positive colonies was performed using Pastorex Staph Plus latex agglutination (Bio-Rad) and PBP2’ latex agglutination (Oxoid) directly from these plates as suggested by the manufacturers. Identification of chromogenic negative colonies was achieved using gram stain, Pastorex Staph Plus and Vetek G1 cards.

**Results**

- **A) Strain Recovery and Growth Characteristics**
  
  All 71 strains of MRSA, after dilution, achieved a 3+ presumptive growth of MRSA. MS presented mauve colonies whereas DB presented blue colonies. In general, DB supported 25% larger colonies than MS throughout the 18-24 hour incubation period. Because of the larger size and better contrast with respect to background, DB’s colonies were more easily visible and an impression was given of a higher yield of growth.

- **B) Screening Specimens**
  
  Of the 750 patient samples inoculated onto DB and MS media, 45 were positive for MRSA. DB recovered all 45 whereas MS recovered 44. Very light growths were easily missed using MS at 18 hours, but colonies became more visible at 24 hours. Both media grew a haze of their respective chromogenic pigments if certain strains of Enterococcus sp. were present. With some experience these became easier to differentiate from true MRSA colonies.

- **C) Prevalence of MRSA/site**
  
  Both media recovered MRSA from each screening site equally well. The following is data from the tertiary care hospital submitting all 3 screening sites; rectal/perineum, throat and nasal. Between throat and rectal/perineum, throat and nasal. Between throat and rectal/perineum, recovery of MRSA was 100%. No nasal swabs were the sole source of MRSA colonization from any patient.

**Conclusions**

Both media selected for and differentiated MRSA effectively between 18 - 24 hours. Oxoid’s Denim Blue was superior in demonstrating larger, more distinct MRSA colonies. This is especially important when considering low colony counts at 18 hour readings. Technologists unanimously found a better contrast of color with Denim Blue. Background flora was more prevalent in MS media and it may, in some cases, have a masking effect on visibility of a very light growth of MRSA at 18 hours. Several articles as well as an unpublished in house evaluation suggests chromogenic agars are superior to mannitol screening agar/MH + OX or FOX combinations. The most valuable benefit of these agars is a reduction of TAT from 2-4 days to 1 day. A further reduction of technologist time (-40%) and consumables suggest that laboratories may want to consider the use of MRSA chromogenic agars. Of interest also is that rectal and throat colonization of MRSA was found to be more frequent than nasal carriage.

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**References**


