ABSTRACT

OBJECTIVE

From October to December 2005, a total of 175 swabs, 33 distal vaginal and 142 recto-vaginal swabs, were collected from pregnant women, using a swab with liquid Amies media (Copan).

RESULTS

From October to December 2005, a total of 175 swabs, 33 distal vaginal and 142 recto-vaginal swabs, were collected from pregnant women, using a swab with liquid Amies media (Copan).

Conclusions: 1) SBD and GRA: very high sensitivity for the detection of GBS (2) GBS easily observed on SBID and GRA without subcultures 3) SBID selective and specific than GRA 4) SBD incubation in air, no need for CO₂ or anaerobiosis.

MATERIAL & METHODS (I)

BACKGROUND

Group B streptococci (GBS) or Strepptococcus agalactiae continue to be a major cause of life-threatening infections in neonates. To prevent GBS perinatal disease, most current guidelines recommend intermittent antenatal prophylaxis for women "at risk"; they are based on prenatal screening culture of all pregnant women at 35-37 weeks of gestation for rectal and vaginal GBS colonization. To provide the highest sensitivity, culture methods must include an enrichment in selective broth. Fetal membranes or amniotic fluid broth is not totally selective for GBS and other Gram-positive cocci may as well be enriched by this method, possibly hiding GBS. Use of selective and differential media could improve the sensitivity of these cultures as well as cut down the turn around time. Based on reported evidence and on experts’ opinion, the Belgian Society for Obstetrics and Gynecology (SBOG) as well as the Belgian Society for Maternal-Fetal Medicine (SBMF) recommend a selective enrichment step. Unfortunately, no selective agent has demonstrated very good performance for GBS prenatal screening from recto-vaginal swabs. It provided results in a short time with a lower workload by comparison to culture on BA.

Material & Methods (II)

Control strains

Positive and negative control strains, Strepptococcus agalactiae and Zonaria eucalypti were, cultured with each run. Very high sensitivity was demonstrated very good performance for GBS prenatal screening from recto-vaginal swabs. It provided results in a short time with a lower workload by comparison to culture on BA.

REFERENCES


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