Evaluation of CHROMagar™ Campylobacter (CAC)

L. Forsberg, C. Barth, K. Malejczyk, J. Minion
Regina Qu’Appelle Health Region, Regina, SK. S4P 0W5

Background

Campylobacter Blood Free agar (CBFA) is commonly used for primary isolation of Campylobacter species. However, final culture results require incubation for 72 hours and break through of non-Campylobacter organisms is common. CAC agar was evaluated to determine if performance could be improved.

Method

Growth and colonial morphology were evaluated with known Campylobacter organisms. Breakthrough growth was evaluated with non-Campylobacter organisms. Clinical specimens were inoculated in parallel to CBFA and CAC, and incubated microaerophilically at 42°C. CAC were examined at 24, 48 and 72 hours. CBFA were examined at 48 and 72 hours. Organisms were identified using the bioMérieux Vitek 2MS.

Results

10 clinical isolates of C. jejuni and 1 of C. fetus grew easily identifiable red colonies on CAC at 24 hours. Isolates of C. fetus, E. faecium, Salmonella, Enterobacter, Proteus, S. aureus, G. epidermidis, and E. coli were totally inhibited. Klebsiella grew as green colonies. Pseudomonas grew as red colonies. 16 clinical stool specimens were inoculated onto both plates. 12 plates were inoculated with C. jejuni: 1 on both CBFA and CAC, and 1 on CAC alone. All isolates on CBFA were identified at 24 hours. 83% of CAC plates had breakthrough of non-Campylobacter red colonies.

Conclusion

The CROMagar TM Campylobacter produced distinct red colonies at 24 hours that identified directly with the bioMérieux Vitek 2MS, and if interpreted, would reduce the final TAT by 24 hours.

References

CHROMagar Campylobacter package insert, CHROMagar, Paris, France.