ABSTRACT

Enzyme Linked Immunosorbent Assay (ELISA) and Reversed Passive Hamagglutination (RPHA) were used for rapid detection of staphylococcal enterotoxins C1, C2. Some experimental conditions were compared, it was found that 5μg/ml of coating antibody, 1% covering sheep serum and 1 : 3000 ~1 : 4000 dilution of antibody enzyme conjugate and sensitized with 0.15mg/ml of purified anti-enterotoxin immunoglobulin are more advisable. Assay sensitivity ranges from 1.25ng to 5.0ng of toxin per ml of sample. The procedure has a good specifity. The rate of blocking (inhibition) test reached more than 50%. Minute amounts of enterotoxins were added to a variety of representative foods that were usually implicated in staphylococcal food poisoning outbreakes. The toxins were consistently detectable by ELISA and RPHA at enterotoxins levels of about 2.5-12.5ng/g of food. In detection of toxin from contaminated foods, the pretreatment with enzyme, acid or base or chloroform is not necessary. No false positive reactions were encountered.

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无血琼脂分离脑膜炎双球菌的效果观察

福建省莆田市卫生防疫站　程法稷　林　琴　曾广达　朱恒芳

脑膜炎双球菌目前所用的培养基需加入一定量的血液，配制繁杂且不易保存。最近国外报道用一种无血培养基分离弯曲菌取得与含血培养基几乎相等的效果。脑膜炎双球菌与弯曲菌有相似的培养条件，为寻找经济简便的分离方法，我们用一种无血含炭培养基与含血培养基进行脑膜炎双球菌分离比较试验，取得了较满意的结果。

常规培养基用50%蛋黄盐水，糖发酵培养基，猪血水巧克力琼脂，均按常法配制；无血含炭琼脂的基础部分为每1000毫升水用日本胨10克，胰胨10克，酵母浸膏5克，氯化钠5克，医用炭4克，琼脂18克，上述成分除炭外加热溶化，调节pH值为7.2～7.4后，再将炭加入混匀，于15磅灭菌20分钟，待培养基冷至约50°C时加入多粘菌素B(25单位/毫升)、万古霉素(3.3微克/毫升)，混匀后倒平板。流脑诊断用多价及单价诊断血清系上海生物制品研究所出品，均在有效期内使用。

以消毒棉拭子采集鼻咽腔分泌物，置蛋黄盐水中，3～4小时内送至实验室，每份样本同时接种于猪血水巧克力琼脂和无血含炭琼脂平板，接种后平板置烛缸内于37°C温箱培养24小时，挑出疑似菌落按常法进行鉴定。鉴定标准照常规。少数菌株其菌形、菌落及生化反应同脑膜炎奈瑟氏菌相似，但与流脑诊断血清不起凝集反应者作为不凝集菌株。

菌落在两种培养基上均为圆形、光滑、湿润，有光泽、半透明，不产生色素，在猪血水巧克力琼脂上，菌落呈淡灰色，大小为1～2毫米；在无血含炭琼脂上，菌落呈灰黑色(与培养基颜色相似)，大小约1.5～2.5毫米。在165份鼻咽腔标本中，两种培养基共检出阳性标本103份，阳性率为62.4%，其中猪血水巧克力培养基检出91份，阳性率为55.2%，无血含炭琼脂检出93份，阳性率为56.4%。两种培养基检出共同阳性80份，共同阴性59份，符合率为86.7%。103株脑膜炎双球菌经诊断血清玻片凝集试验结果，B群93株(90.3%)，319群2株(1.9%)，未能分群8株(7.8%)。

脑膜炎双球菌在猪血水巧克力琼脂和无血含炭琼脂上所形成的菌落形态相似，两种培养基的分离符合率为86.7%，而无血含炭培养基成本低，配制方便，易于保存，更方便于分离工作，有进一步探讨的价值。

（参加本实验的还有：梁爱民和祁　燕同志）