

仅需3小时,不需复杂设备,携带方便,特别适于大规模流行病学调查和临床快速诊断,亦便于基层医疗单位开展。本方法还可用于其它病原体抗原和抗体的检测[1~5],满足不同临床和科研需要。

我们在实验中观察到受检血清高稀释度者斑点显色反较低稀释度者为深,这种前带现象,可能与其它血清蛋白在一定面积上吸附遮盖了一部分表面抗原决定簇有关。此外,实验中还观察到溶血标本和全血标本对结果的干扰,使之出现假阳性,可能是细胞内过氧化物酶释放的缘故。

A Simple and Rapid Method for Detection of Serum HBsAg — Labelled Avidin-Biotin Dot Enzyme Linked Immunosorbent Assay
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Hepatitis B surface antigen (HBsAg) in 190 sera specimen were detected with labelled avidin-biotin dot enzyme linked immunosorbent assay (LAB-Dot ELISA). It was shown that the positive rate by LAB-Dot ELISA and by reverse passive hemagglutination (RPHA) were 82.6% and 65.7%, respectively. Using LAB-Dot ELISA the lowest concentration for detecting HBsAg was up to 0.01µg/ml. It was more sensitive 8 to 16 times than RPHA. The specificity and reproducibility of this method were also confirmed. The

LAB-Dot ELISA was simple and inexpensive. The entire assay could be completed within 3 hours. After dotting the nitrocellulose sheet could be stored over one month It was suitable especially for the epidemiological investigations of hepatitis B.

Key Words HBsAg Biotin Avidin Dot ELISA

参 考 文 献

1. Towbin H, et al. Immunoblotting and dot immunobinding--current status and outlook. *J Immunol Method* 1984; 72: 313.
2. Styra M, et al. Dot-based ELISA and RIA: Two rapid assays that screen hybridoma supernatants against whole live cells. *J Immunol Method* 1984; 73: 75.
3. kumar S, et al. A dot enzyme-linked immunosorbent assay for detection of antibodies against entamoeba histolytica. *J Immunol Method* 1985; 83: 125.
4. Handman E, et al. Nitrocellulose-based assays for the detection of glycolipids and other antigen: Mechanism of binding to nitrocellulose. *J Immunol Method* 1985; 83: 113.
5. Dao ML, .An improved method of antigen detection on nitrocellulose in situ staining of alkaline phosphatase conjugated antibody. *J Immunol Method* 1985; 82: 225.
6. 郝连杰, 等. 标记抗生物素-生物素酶联免疫吸附试验检测血清HBsAg的初步报告, 同济医科大学学报 1986; 15(6): 434.
7. Guesdon JL, et al. The use of avidin-biotin interaction in immunoenzymatic techniques. *J Histochem Cytochem* 1979; 27: 1131.
8. 蒋成淦. 酶免疫测定法. 第一版. 北京: 人民卫生出版社, 1984: 11.

衡水地区家鼠型出血热调查分析

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1984年1月至1985年5月间,我区发生了流行性出血热(下称EHF)的流行,首批病人28例,其传染源是褐家鼠和小家鼠,临床类型以重型为主,与国内其他地区家鼠型出血热以临床轻型为主有明显的不同,现报告如下、

一、流行病学特点: 发病者男多于女23:5; 年龄17~65岁。职业以农民为主。发病于1月1例, 2月3例, 3月5例, 4月14例, 5月5例。分布在7个县, 20个乡, 26个自然村。均为一户1例, 25例一

村1例, 仅3例发生在一个自然村。

二、临床资料: 多数病人有典型的五期经过, 临床经过重。按卫生部颁布标准: 轻型5例, 中型7例, 重型14例, 危重型2例; 死亡6例。28例中24例作IFAT检查, 均呈阳性。抗体滴度在1:80~2560之间。

三、传染源调查: 5种鼠肺477份, 其中褐家鼠165份, 阳性20份, 阳性率2.8%; 小家鼠肺252份, 阳性7份, 阳性率2.8%, 其余鼠种全部阴性,