



## BCG vaccine combined with dipyridamole in the treatment of HBV infection

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### Abstract

**AIM:** To investigate the effect of BCG vaccine and dipyridamole in treating hepatitis B due to their anti virus effects.

**METHODS:** Among 602 patients with positive HBeAg, 512 were allocated to the treatment group and 90 patients to the control group. There was no significant difference in disease and age between the two groups. All the patients in the treatment group with no abnormal findings by chest X-ray fluoroscopy, whose local skin scleromata diameters were less than 7 mm after the 1:2000 OT test, were given BCG vaccine 0.1 mL intracutaneously at the deltoid once a month, and simultaneously took dipyridamole 50 mg twice a day for four to eight months. The hepatic function, B-mode ultrasound and the five markers of hepatitis B were routinely examined before

each injection. The results at one month after the last injection in the treatment group were compared with those of the control group.

**RESULTS:** The recovery rates of hepatic functions and the rates of improvement of the symptoms and signs in the treatment group were better than those in the control group. The negative transformation rates of HBeAg and the positive transformation rates of HBeAb were 60.3% and 31.6% in the treatment group vs 13.3% and 13.0% in the control group ( $P < 0.01$ , Test  $\chi^2$ ,  $\chi^2 = 26.82, 6.81$ ). The negative transformation rates of HBsAg and the positive transformation rates of HBsAb were 5.5% and 8.2% in the treatment group vs 5.6% and 9.9% in the control group ( $P > 0.05$ , Test  $\chi^2$ ,  $\chi^2 = 1.11, 0.22$ ).

**CONCLUSION:** The application of BCG vaccine in combination with dipyridamole increased the negative transformation rate of HBeAg and the positive transformation rate of HBeAb, improved the clinical symptoms, signs and hepatic function of the patients. These two drugs had significant anti-HBV effect and showed good efficacy in the treatment of HBV infection.

**Key words:** Hepatitis B virus/therapy; BCG vaccine; Dipyridamole; Antiviral agents

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