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## Association of polymorphisms in survivin gene with the risk of chronic HBV in Iranian population: a case control study

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### Abstract:

**Background and Aim:** Survivin can affect the progression of infection and is considered as a marker of various malignancies. The aim of the study was to investigate the possible association of gene polymorphisms of survivin (1547A/G, -644C/T, -625 C/G, -241C/T, -31G/C, -141G/C) and chronic hepatitis B infection in Iranian patients.

**Methods:** The genotypes of survivin SNPs were investigated by polymerase chain reaction restriction fragment length polymorphism (PCR-RFLP) method. Serum level of survivin was determined using ELISA method.

**Results:** The -1547G, -625C, -241T and -31C alleles were associated with increased susceptibility to chronic hepatitis B infection (P = 0.001, P = 0.000, P = 0.003 and P = 0.000 respectively). Chronic HBV patients with -625CC, -241TT and -31CC genotypes had higher levels of survivin.

**Conclusions:** Survivin 1547A/G, -625 C/G, -241C/T and -31G/C gene polymorphisms may be associated with chronic HBV susceptibility in Iranian HBV patients.

**Key words:** Survivin, Chronic hepatitis B, polymorphisms.