

**Project No : 3569/2006**

## **Angiogenesis in relation to apoptosis in gall bladder carcinomas**

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### **Principal Worker**

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### **Unit**

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### **OBJECTIVES**

Multiple sequential genetic alterations occur in carcinogenesis and in progression of tumours. One of the commonly mutated genes in human cancers is p53, a tumor-suppressor (Ts) gene which is involved in the regulation of apoptosis. We analysed the role of P53, and its relation to the grade, in gall bladder carcinomas (GBC) by immunohistochemical methods. The gold standard for detecting CPPV is laparoscopic evaluation. Various authors have described ultrasonography as a useful mode for diagnosing inguinal hernia. This study is focussed on comparing these two methods of diagnosis in all patients of unilateral inguinal hernia reporting to this hospital between Jul 2006 and Jun 2009.

### **METHOD**

A total of 40 cases were studied. GBCs were graded histopathologically into well differentiated (WD), moderately differentiated (MD), poorly differentiated (PD) carcinoma and undifferentiated categories. Sections were also immunostained by using P53 antibody clones and a semi-quantitative evaluation period.

### **RESULTS**

Of the 40 cases studied, 12 (30%) were WD, 19 (47.5%) MD and 09 (22.5%) were PD. All cases of normal GB mucosa assessed were negative for P53. Increased expression of P53 protein was found in 77.5% of GBCs and a significantly higher grade was found in PD tumours.

### **RECOMMENDATIONS**

P53 immunohistochemical staining emerged as a useful supplement of histopathological assessment. Our findings of a high incidence of P53 immunoreactivity in GBC support the premise that loss of the apoptosis regulating gene P53 is central to the development of GBC and provide evidence for the role of apoptosis in increasing grades of tumour in GBCs.