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**Original article:**

**Preinvasive and invasive malignant lesions and nonmalignant-SOL of**

**eye and its adnexa**

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**ABSTRACT**

**Introduction:** Our aim was to describe and compare the epidemiological characteristics, morphology and clinico-pathological correlation of patients with preinvasive and invasive malignant lesions and nonmalignant space occupying lesions (nonmalignant-SOL) of eye and its adnexa as seen in Ahmedabad, India from 2008 to 2010.

**Materials and methods:** We analysed 144 surgical specimens of the eye and its adnexa lesions seen over a three year period. Of these 144 cases, 110 histologicaly proved cases of preinvasive and invasive malignant lesions and nonmalignant-SOL were included in the study.

**Results**: This study included 110 patients of which 51.86% were male and 48.2% were female. Bimodal peaks in incidence of ophthalmic lesions was seen; one peak in below 10 years age and another after 40 years age. Eyelid (47%) was the most commonly affected site. Lympho-vascular hamartomas (12.7%) were most frequent nonmalignant-SOL. Ocular surface squamous neoplasia (OSSN) was the commonest group of neoplastic lesions (13.4%). Malignant and non malignant cases were (38.2%) and (62.8%) respectively. Incidence of cases with malignant lesions was sharply increased after 40 years of age. The most common cancer was meibomian gland carcinoma (9.1%), followed by squamous cell carcinoma (8.2%).

**Conclusion:** Multiple factors such as location of eye affected by the lesion, age and sex of patient, geographical, racial and environmental conditions determine the frequency and variability of eye lesions; and awareness to these factors can augment clinical and histology diagnosis correlation. Histopathological examinations of excised or incised orbital or ocular lesions are absolutely mandatory to come to a definitive diagnosis.

**Keywords:** Eye lesions, malignant lesions, OSSN.