Intestinal Type Adenocarcinoma of Nose and Paranasal Sinuses- A Case Report

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Introduction

Intestinal-type adenocarcinoma (ITAC) is the second most common type of adenocarcinoma of nose & paranasal sinuses. It is composed of growth patterns that resemble carcinomas or adenomas of intestinal origin, or it may mimic normal histology of intestinal mucosa. Over-all incidence of ITAC is less than 1% of all neoplasms and accounts for possibly 1.4% of tumours in the region. ITAC occur mostly in males in a wide range with a mean around 50-64 years. The tumour are most often localised in the ethmoid sinus (40%), followed by nasal cavity (25%) and the maxillary Antrum (20%). ITAC are aggressive malignancies, and may spread to adjacent structures including the orbit, the pterygopalatine fossa, the infra temporal fossa and the cranial cavity.

The aim of this report is to present a case of intestinal type of adenocarcinoma of nose and paranasal sinuses with no recurrence after 6 months post operatively.

Method

A 40 year old, hindu male, clerk by occupation, resident of jodhpur came to our department with chief complaints of bleeding from left nose, left side nose obstruction and heaviness of head for 2 years. Bleeding from nose was intermittent and spontaneously stops and constant nasal obstruction of left nose was present. Anterior rhinoscopy was done which shows a mass in left nasal cavity which was reddish-blue in colour,bleeds on touch,soft in consistency which was suggestive of inflammatory polyp. So Micro deb-rider assisted functional endoscopic sinus surgery was done, intra operative findings are there was erosion of nasal septum posteriorly along with mass seen in left nasal cavity , which was extending upto maxillary Antrum of left side, ethmoid sinuses and sphenoid sinuses of left side. Biopsy sent for histopathological findings. As there was no erosion of maxillary wall, maxillectomy was not done. Biopsy shows well differentiated intestinal type Sinonasal adenocarcinoma, resembling colonic mucosa with extravasated pools of mucin, extending into stroma.

Results

Biopsy was taken from left nose and sent for histopathology examination which was suggestive of inflammatory polyp. So Micro deb-rider assisted functional endoscopic sinus surgery was done, intra operative findings are there was erosion of nasal septum posteriorly along with mass seen in left nasal cavity, which was extending upto maxillary Antrum of left side, ethmoid sinuses and sphenoid sinuses of left side. Biopsy sent for histopathological findings. As there was no erosion of maxillary wall, maxillectomy was not done. Biopsy shows well differentiated intestinal type Sinonasal adenocarcinoma, resembling colonic mucosa, with extravasated pools of mucin, extending into stroma.

Patient was sent for Radiotherapy and 25 cycle of radiotherapy was given. Colonoscopy and CECT abdomen was normal. No recurrence was seen after 6 months follow up.

Discussion

A remarkable association has been identified between long term exposure to wood dusts and the occurrence of ITAC. In woodworking industries, workers with occupational exposure to hardwood dust may show incidence 1000 times those of general population. Occupational wood dust exposure has been observed in carcinoma 20% of cases. Interestingly, the highest incidences are seen in woodworkers in the furniture industry where hardwoods, particularly beech and oak, are used. Also, ITAC is frequent in long-term wood dust exposure in woodworkers who lay hardwood floors. Also, occupational exposure to dusts in the shoe and leather industry and in textile manufacture. Possible role of tannins has been suspected as carcinogenic compound. The cumulative exposure time to wood dusts and the occurrence of ITAC. In woodworking industries, workers with occupational exposure to hardwood dust may show incidence 1000 times those of general population. Occupational wood dust exposure has been observed in carcinoma 20% of cases. Interestingly, the highest incidences are seen in woodworkers in the furniture industry where hardwoods, particularly beech and oak, are used. Also, ITAC is frequent in long-term wood dust exposure in woodworkers who lay hardwood floors. Also, occupational exposure to dusts in the shoe and leather industry and in textile manufacture. Possible role of tannins has been suspected as carcinogenic compound. Also, occupational exposure to dusts in the shoe and leather industry and in textile manufacture. Possible role of tannins has been suspected as carcinogenic compound.

Conclusion

Intestinal type Sinonasal adenocarcinoma are very rare malignancy of the nasal cavity and paranasal sinuses. Its association with occupational exposure to dust has been reported, but sporadic cases have been reported.

Diagnostic imaging is essential to exclude metastatic disease from the colon and may be supported by immune & histochemical studies of biopsy specimen. Treatment consists of surgery, radiation or both, but its effect on prognosis is heavily influenced by the stage at which the disease presents.

Reference