# MIDLINE GRANULOMA

M. A. Şehitoğlu, M.D.\* / C. Üneri, M.D.\*\* / S. A. Tutkun, M.D.\*\*\* / M. Çelikoyar, M.D.\*\*\*

- \* Professor, Department of Otorhinolaryngology, Faculty of Medicine, Marmara University, Istanbul, Turkey.
- \*\* Assistant Professor, Department of Otorhinolaryngology, Faculty of Medicine, Marmara University, Istanbul, Turkey.
- \*\*\* Research Assistant, Department of Otorhinolaryngology, Faculty of Medicine, Marmara University, İstanbul, Turkey.

## INTRODUCTION

This clinical picture, which has a quite destructive course has been referred with various names such as stewart type non-healing granuloma, polimorphic reticulosis, gangrenous granuloma, etc. (1). This variety of nomenclature is due to too many unknowns in the etiopathogenesis of the disease. Also the rarity of cases, makes it more difficult to set up standard diagnostic and therapeutic criteria. In this article, we are presenting a midline granuloma case which has been diagnosed in our clinic.

Key Words: Midline granuloma, primary infections, neoplasms, inflammatory diseases.

## CASE REPORT

A 38 year old, male patient called onto us with the complaint of a sore on his palate. In his past history, he had had an ulcer on soft palate for three months and he did not have any accompanying complaints apart from malaise. Physical Examination findings were within normal limits. In the ENT examination there was a foul odor radiating from the nose and mouth; a depression of the nose bridge, disseminated crusts on the nasal mucosa, wide destruction in the nasal septum, and a 3 cm long fistula at the junction of hard and soft palates (Fig 1). Apart from routine laboratory tests and anti-sphylitic serological examination, swabs taken from affected tissues, and biopsies via punch-forceps were sent both for histopathological and microbiological examinations (Fig 2). The results of routine laboratory tests are documented: HB: 12.1%, Htc: 35.8, eryrthrocytes: 4.480.000, leukocytes: 66800 and ESR: 26 mm/hour. The sedimentation rate was found to have been increased. The serologic test, VDRL, Wright and HTLV-III tests were negative. Sinus graphies revealed mucosal thickening of the right antrum. Computerized tomographic examinations also revealed a large perforation of septum and fluid accumulation in the right antrum. Under microbiological evaluation, promirabilis colonies were Histopathological studies which helped the diagnosis confirmed a midline granuloma. Since then the patient has been put on a radiotherapy protocol under our continuous surveillance. A total dose of 5000 rad was applied in 20 sessions with a fructional dose of 250 rad. We were planning a possible fistula repair or insertion of a prosthesis device but after radiotherapy the patient did not come to our routine controls.

#### DISCUSSION

Midline granuloma is the name given to a heterogenous group of diseases with different etiologies. Within the common causes are primary infections, neoplasms and inflammatory diseases (2). Although the presence of dense granulomatous reaction with tissue destruction and mutilation, none of the studies could show the presence of a responsible antigen (3). Microbiological studies of the lesion are usually not significant, even if an organism is isolated, they are usually secondary infections (4). Hence we didn't consider proteus vulganis, isolated in this case, significant for treatment. Some authors mention that, this disease may have a correlation with or preced with lymphoreticular diseases (3.5). Some even claim that midline granuloma itself is a lymphoreticular disease (6).

In the majority of patients, the main findings are related to the nose. Ulcerations may be seen on the nose, nasal mucosa and on the gingivae. There is usually a rapid progression after the beginning of the ulcer. Soft and hard palate perforations may be observed in some patients (4).

This disease progresses locally and does not spread below the neck. Although some spontaneous remissions have been reported, the course is usually fatal if untreated. Among the common causes of death are secondary infections, bleeding due to erosion of a major blood vessel or menengitis (3,4,6).

There are no characteristic histopathological findings for this disease except granulamotous inflamation. necrosis and tissue destruction. In histopathological examinations, the only findings are acute and chronic inflamation and necrosis (3). In some cases, giant cells may be seen. As a rule, in the presence of vasculitis, Wegener Granulamotosis is the most likely diagnosis. But still, in almost 50% of cases, the inflamatory cells are seen around the vessels. Even non-caseating granulomas are supportive findings, the diagnosis is mainly based on the clinical picture (3.4).

Laboratory findings are almost entirely non-specific. These findings are usually related to secondary infection. Mild anemia, leucocytosis, increased ESR, hyperglobulinemia and pansinusitis may be obtained in radiological examination (4).

In the differential diagnosis, it is possible to eliminate bacterial and fungal infections in the light of clinical, microbiological and pathological findings. Wegener Granulomatosis may be ruled out by the absence of vasculitis and systemic findings such as lung and kidney involvement. In the presence of malignant cells in histopathological examination other diagnoses have to be considered (1). Even in the absence of

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Figure 1. Appearance of the wide destruction at the junction of hard and soft palate.

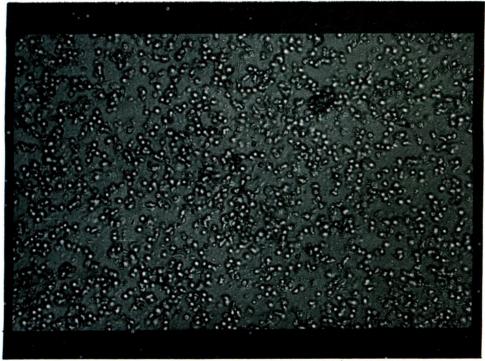


Figure 2. HE×310, Histopathological appearance of the lesion, note the mixed cellular infitration around wide necrotic area.

malignant cells, it may not be possible to differentiate it from malignant lymphoma with histopathologic appearance (1). According to Harrison (1987), this picture is actually a malignant lymphoma (6).

Superinfections must be treated appropriately. The benefit obtained from the use of cytotoxic drugs are doubtful, on the contrary, they may even turn out to be harmful. There has not been enough data to evaluate the use of cytotoxic drugs (1).

Surgical treatment is not only useless but may even profoundly alter the course of the disease. Radiotheraphy must be the choice of treatment for localized lesions. Even low dose radiotheraphy (1000 rad.) has been reported to be useful. The frequency of relapses (3), and the chance of missing the possible diagnosis of malignant lymphoma (1.4) due to the similarity in histological appearance, and the fact that it is considered as a malignant lymphoma (6) by some authors have led to the application of high dose radiotheraphy (4000-6000 rad) (5).

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