

## Metastasizing Benign Pleomorphic Adenoma with Associated Candidiasis

Dr. Ekta Rani, MD<sup>1</sup>, Dr. Sahil Chhabra, MD<sup>1</sup>, Dr. Bhaskar Jain, MD<sup>1</sup>, Dr. Vijay Suri, MD<sup>2</sup>, Dr. Neha Bhardwaj, MBBS<sup>3</sup>

<sup>1</sup>Assistant Professor, Department of Pathology, Adesh institute of medical sciences and research, Bathinda, Punjab, India

<sup>2</sup>Professor, Department of Pathology, Adesh institute of medical sciences and research, Bathinda, Punjab, India

<sup>3</sup>Junior Resident, Department of Pathology, Adesh institute of medical sciences and research, Bathinda, Punjab, India

DOI: 10.36347/sjmcr.2019.v07i07.021

Received: 13.07.2019 | Accepted: 27.07.2019 | Published: 30.07.2019

\*Corresponding author: Dr. Ekta Rani

### Abstract

### Case Report

Metastasizing pleomorphic adenoma (MPA) is very rare neoplasm. Parotid gland is 74% likely to be involved by MPA followed by minor salivary glands and submandibular glands. It is histologically benign pleomorphic adenoma that manifests local or distant metastasis. Candidiasis of parotid gland is extremely rare. We present a case of MPA of right parotid gland in a 54-year female showing metastatic deposits in ipsilateral preauricular lymph node, with candidiasis. To the best of our knowledge, no case of MPA with associated candidiasis has been reported yet.

**Keywords:** Metastasizing pleomorphic adenoma, parotid, candidiasis, lymph node.

**Copyright @ 2019:** This is an open-access article distributed under the terms of the Creative Commons Attribution license which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use (NonCommercial, or CC-BY-NC) provided the original author and source are credited.

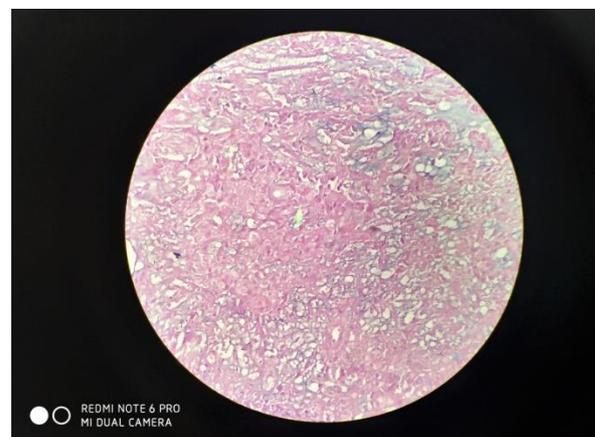
## INTRODUCTION

Pleomorphic adenoma (PA) is the most common benign tumor of the salivary glands. Metastasizing pleomorphic adenoma (MPA) is very rare neoplasm [1]. Parotid gland is 74% likely to be involved by MPA followed by minor salivary glands and submandibular glands [2]. It is histologically benign pleomorphic adenoma that manifests local or distant metastasis. Bone is the most common site for metastasis followed by head and neck, lungs and abdominal organs. Only 17% cases metastasized to regional lymph nodes in the head and neck region. Nearly about 81% patients have a history of at least 1 local recurrence of PA before the distant metastasis [3]. Infection of the parotid gland most commonly has a viral or bacterial origin. Candidiasis of parotid gland is extremely rare [4]. To the best of our knowledge, no case of MPA with associated candidiasis has been reported yet.

## Case Report

A 54 years female presented with chief complaint of swelling over right parotid region for 34 years. The swelling was gradually increasing in size. No pain or signs of facial palsy were present. Routine hematological investigations and viral markers were normal. Swelling was excised and sent to the department of pathology AIMS Bathinda. On gross examination, partially encapsulated parotid swelling

measuring 4.5x3x2 cm was received. Cut surface was grey white. Also received a Preauricular lymph node measuring 1.5cm in diameter. Microscopic examination shows an encapsulated biphasic tumor composed of benign epithelial component arranged in clusters, acini, cords and sheets comprising of round to oval to spindle shaped cells admixed with mesenchymal component exhibiting chondromyxoid stroma with large areas of hyalinization and focal adipose tissue. Scattered spores and pseudohyphae of candida were noted. PAS stain confirmed the candidiasis. Lymph node was replaced by the similar tumor histomorphology. So, a diagnosis of metastasizing Pleomorphic adenoma with candidiasis was made.



## DISCUSSION

Pleomorphic adenoma (PA) is the most common benign tumor of the salivary glands. Rarely PA undergoes malignant transformation like carcinoma ex pleomorphic adenoma or carcinosarcoma. Metastasizing PA is even rarer than malignant transformation.

Chief complaints of the patients are lower back pain, abdominal mass, cranial nerve palsy, nasal obstruction and anosmia, dyspnoea, acute spinal cord compression, pathological fractures and hip pain [5].

Mostly patient have a history of local recurrence. Local recurrence of PA is due to incomplete resection during surgery. Excision of gland associated with adjuvant radiotherapy is the mainstay treatment to avoid distant spread [2]. Selective neck dissection and postoperative radiotherapy are indicated for regional lymph node metastasis [6].

Many hypothesis have been formulated to explain the metastasis of benign tumor-

- Previous surgical intervention of PA which leads to blood vessels and lymphatic vessels permeation by tumor cells causing metastasis [2].
- Czader *et al.*, proposed the hypothesis for metastasis capability of MPA due to genetic mutations [7].

Salivary gland infection with candida is extremely rare and often an underlying malignant disease or immunocompromising condition is present. With the best of our knowledge only a handful cases of parotid gland with candidiasis are reported yet. No case ever reported that shows association of Metastasizing Pleomorphic adenoma with candidiasis.

## REFERENCES

1. Alves, F. A., Perez, D. E., Almeida, O. P., Lopes, M. A., & Kowalski, L. P. (2002). Pleomorphic adenoma of the submandibular gland: clinicopathological and immunohistochemical features of 60 cases in Brazil. *Archives of Otolaryngology-Head & Neck Surgery*, 128(12), 1400-1403.
2. Rodríguez-Fernández J, Mateos-Micas M, Martínez-Tello FJ, Berjón J, Montalvo JJ, Forteza-González G, Galan-Hernández R. Metastatic benign pleomorphic adenoma. Report of a case and review of the literature. *Medicina Oral, Patología Oral y Cirugía Bucal*. 2008 Mar;13(3):E193-6.
3. Nouraei SA, Ferguson MS, Clarke PM, Sandison A, Sandhu GS, Michaels L, Rhys-Evans P. Metastasizing pleomorphic salivary adenoma. *Archives of Otolaryngology-Head & Neck Surgery*. 2006 Jul 1;132(7):788-93.
4. Even-Tov E, Niv A, Kraus M, Nash M. Candida parotitis with abscess formation. *Acta otolaryngologica*. 2006 Jan 1;126(3):334-6.
5. Luis E, Gary M, Hector S, Maria S, Axel A. Metastasizing Pleomorphic adenoma: A Fascinating Enigma. *Case Reports in Medicine*, 2012, 1-5.
6. Robins KT, Samant S, Ronen O. Neck dissection. In: Flint PW, Haughey BH, Lund VJ, editors. *Cummings Otolaryngology Head & Neck Surgery*. 5th edition. Philadelphia, Pa, USA: Mosby Elsevier; 2010, 1702-1725.
7. Czader M, Eberhart CG, Bhatti N, Cummings C, Westra WH. Metastasizing mixed tumor of the parotid: initial presentation as a solitary kidney tumor and ultimate carcinomatous transformation at the primary site. *The American journal of surgical pathology*. 2000 Aug 1;24(8):1159-64.