

Letter TJH-2018-0302.R1

Doi: 10.4274/tjps.galenos.2019.2018.0302

Submitted: 31 August 2018

Accepted: 17 April 2019

Title of the article: Myeloid sarcoma of the parotid and stomach presenting with obstructive jaundice; a rare presentation

Running title: Myeloid sarcoma of the parotid and stomach

Contributors

1. Sugeeth M Thambi, M.D <sup>1</sup>

2. Sreejith G Nair, D.M <sup>1</sup>

3. Rony Benson M.D <sup>1</sup>

4. Jayasudha A Vasudevan M.D <sup>2</sup>

5. Rekha A Nair M.D <sup>2</sup>

1, Department of Medical Oncology

2, Department of Pathology

Regional Cancer Centre, Thiruvananthapuram, India 695011.

All authors have contributed significantly to this article

Source(s) of support: Nil

Conflicting Interest: Nil

Acknowledgement: Nil

Corresponding Author:

Rony Benson

Senior Resident

Department of Medical Oncology

Regional Cancer Centre, Thiruvananthapuram 695011, India.

Phone +91944792936

Email- [ronybenson@gmail.com](mailto:ronybenson@gmail.com)

To the Editor,

Myeloid Sarcoma [MS] is the extra-medullary deposit of immature myeloid cells and disrupts the normal tissue architecture [1]. MS commonly occur in skin, CNS, eyes, and testis. Gastrointestinal involvement is common [2, 3]. Here we present a case of isolated MS of the parotid and stomach presenting with jaundice.

Fifty five year old male, was evaluated with swelling in the right parotid for two months. Fine needle aspiration was suggestive of a parotid neoplasm and patient underwent a right sided total parotidectomy. Post op histopathological examination was suggestive of non Hodgkin's lymphoma. While patient was recovering the patient developed jaundice. On evaluation liver function tests showed bilirubin of 5.3 mg/dL (Direct - 4.2 mg/dL). A contrast enhanced computed tomography of the neck chest and abdomen was done, which showed irregular soft tissue thickening in the parotid bed along with enlarged enhancing left level IB nodal area (21\*12 mm). Abdomen showed intra-hepatic biliary radicle dilatation with a soft tissue nodule at the porta. There was also soft tissue thickening involving the cardia and lesser curvature of the stomach along with multiple enlarged peri-gastric nodes [Figure 1].

Peripheral smear and bone marrow studies were normal. Review of the parotidectomy specimen showed a neoplasm composed of atypical medium to large cells. Tumor cells were myeloperoxidase positive, CD33 positive, CD43 focal positive, CD68 negative and were compatible with MS (Figure 2). During work up bilirubin increased to 20 mg/dL and the patient underwent percutaneous trans-hepatic biliary drainage. Upper gastro intestinal endoscopy was suggestive of mucosal irregularity involving cardia and lesser curvature of the stomach. Endoscopic guided biopsy from the lesion was suggestive MS. The patient's bilirubin normalised after stenting.

The patient was planned for 7+3 induction (7 days of cytarabine at 100 mg/m<sup>2</sup> as 24 hour infusion along with 3 days of daunorubicin at 60 mg/m<sup>2</sup>). Post induction re-evaluation was done and contrast enhanced computed tomography showed no significant lymph nodes with significant reduction in the gastric and duodenal wall thickening along with resolution of intra-hepatic biliary radicle dilatation. The patient was planned for consolidation with high dose cytarabine and received 3 cycles. The patient was kept on follow up after completion of 3 cycles.

Isolated MS usually does not produce any specific symptoms except local symptoms of the organ involved. Local imaging is usually warranted in the form of computed tomography or magnetic resonance imaging [4]. Bone marrow study is also warranted to confirm isolated MS as most occur in patients with AML. Systemic therapy is warranted in such cases patients receive induction chemotherapy similar to AML as in our case [5]. The five years survival in patients with MS is in tune of 20% and the use of chemotherapy has been associated with better survival [6]. There are reports that malignant cells in chloroma may evade immune surveillance and thus higher chance of survival. Another contributing factor to immune escape is the partial loss of several human leukocyte antigen (HLA) class I [7].

## References

1. Campidelli C, Agostinelli C, Stitson R, Pileri SA. Myeloid sarcoma: extramedullary manifestation of myeloid disorders. *American journal of clinical pathology*. 2009; 132: 426-437.
2. Vachhani P, Bose P. Isolated gastric myeloid sarcoma: a case report and review of the literature. *Case Rep Hematol*. 2014; 2014:541807
3. Derenzini E, Paolini S, Martinelli G, Campidelli C, Grazi GL, Calabrese C, Zinzani PL, Baccarani M. Extramedullary myeloid tumour of the stomach and duodenum presenting without acute myeloblastic leukemia: a diagnostic and therapeutic challenge. *Leuk Lymphoma*. 2008; 491:159-62.
4. Bakst RL, Tallman MS, Douer D, Yahalom J. How I treat extramedullary acute myeloid leukemia. *Blood*. 2011; 118:3785-93.
5. Yamauchi K, Yasuda M. Comparison in treatments of nonleukemic granulocytic sarcoma: report of two cases and a review of 72 cases in the literature. *Cancer*. 2002; 94:1739-46.
6. Lan TY, Lin DT, Tien HF, Yang RS, Chen CY, Wu K. Prognostic factors of treatment outcomes in patients with granulocytic sarcoma. *Acta Haematol*. 2009; 122:238-46.
7. Johansen S, Kollsete Gjelberg H, Ahmed AB, Bruserud , Reikvam H. Myeloid Sarcoma after Allogenic Stem Cell Transplantation for Acute Myeloid Leukemia: Successful Consolidation Treatment Approaches in Two Patients. *Case Rep Oncol Med*. 2018 Feb 28;2018:7697283.

Figure 1: Contrast enhanced computed tomography of the neck chest and abdomen showing intra-hepatic biliary radicle dilatation and stomach wall thickening involving the cardia and lesser curvature of the stomach(1a) and post induction scan showing significant reduction in the stomach wall thickening and resolution of intra-hepatic biliary radicle dilatation (1b)

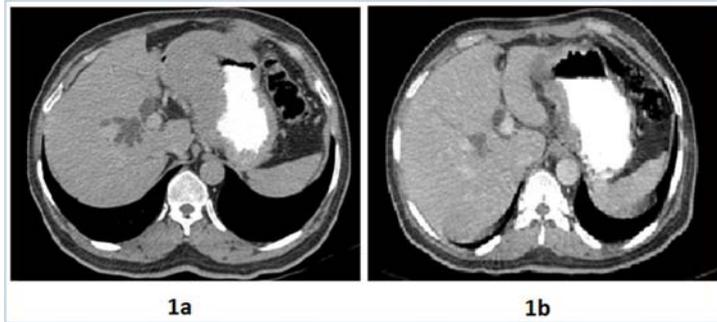


Figure 2: (a) Hematoxylin and eosin sessions showing atypical cells with medium to large with scanty cytoplasm, irregular nuclear membranes, (b) tumor cells positive for myeloperoxidase

