Primary cutaneous mucinous adenocarcinoma is a rare lesion, first described by Lennox in 1952 as a mucin secreting tumor of the scalp.1 There are approximately 140 known cases published, the majority of which can be found in the Dermatology literature. We present a case of primary cutaneous mucinous adenocarcinoma of the face in a 63-year-old male and highlight the necessary diagnostic work up and management considerations for this tumor.

**INTRODUCTION**

Primary cutaneous mucinous adenocarcinoma is a rare lesion, first described by Lennox in 1952 as a mucin secreting tumor of the scalp. The difficulties in differentiating primary from metastatic lesions histologically mandates physicians who make an initial diagnosis of mucinous carcinoma to consider the possibility of metastasis from an occult primary lesion. Thus in cases where the histology is indeterminate, additional evaluation is required to rule out previously unrecognized disease. CT scans of the chest, abdomen, and pelvis are recommended and upper and lower endoscopy should be considered as well. Additionally, the potential for PET/CT utility for these malignancies has been raised. However, false negative PET scans have previously reported in mucinous producing carcinomas, theoretically due to their hypocellularity.16,19 A recent study on recurrent colorectal tumors reported dedicated PET sensitivity of 92% for non mucinous lesions but only 58% sensitive for mucinous tumors.18 There is one recent case report of mucinous carcinoma with fatal regional and distant metastasis in spite of negative CT, PET/CT, and endoscopy.15

**CASE REPORT**

A 63-year-old man presented with history of left medial eyebrow skin lesion for approximately 1 year. The left medial eyebrow contained a 1cm soft mobile nodule. Dermatology performed an excisional biopsy; gross specimen size 0.9 x 0.6 x 0.5 cm. Final histopathological diagnosis, after confirmation with the AFIP, was mucinous apocrine tumor consistent with moderately differentiated mucinous (eccrine) carcinoma, incompletely excised. Sections showed a papillary cystic neoplasm with foci of decapitation secretion and large mucin pools with “floating” islands of tumor cells, consistent with mucinous carcinoma. (H&E, magnification at 2.5x, 10x, and 40x).

The patient subsequently underwent resection of the biopsy site with 5mm circumferential margins (Figures 1-2). No grossly obvious tumor was seen. The deep margin extended to the underlying muscle fascial layer. The elliptical defect was closed primarily in a multi-layered fashion. The patient’s postoperative course was unremarkable. Final pathologic report indicated no residual tumor identifiable on the specimen. The patient was subsequently referred to Hematology-Oncology for occult disease work-up. CT chest/abdomen/pelvis and PET/CT were both negative for occult malignancy. Upper endoscopy and colonoscopy were performed and were both normal. As of 12 months post operatively, the surgical site is well healed and shows no sign of recurrence.

**DISCUSSION**

The disease is typically thought of as having an indolent course, as the duration of disease prior to diagnosis has ranged from several months to 5 years, even up to 20 years in select patients.2,3 Local recurrence following surgical excision have been reported as high as 30-45%.1,3 Isolated cases as young as 8 years old and as old as 84 years old have been reported.3,4 The involved site is the eye, face, and/or scalp in over 75% of cases.5 The single most common site is the perilobal region (~40%), and over half of those were lower eyelid lesions.1,5 Lesions have also been reported on the cheek, chin, nose, axilla, chest, abdominal wall, foot, and vulva.2,14 Often, they can be transilluminated, which is consistent with their mucinious content.

**REFERENCES**