Things are not Always What They Seem: A Rare Case of Pancreatic Carcinoma Manifesting through Cutaneous Metastasis

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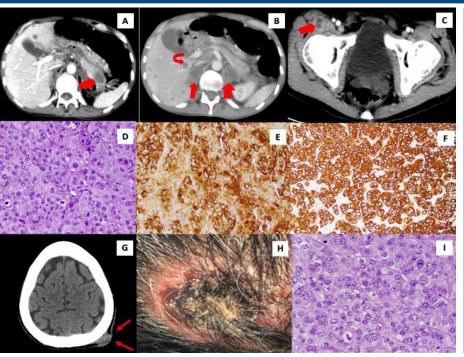
Introduction:

Pancreatic cancer is an aggressive disease and commonly metastasizes to the liver, lung, and perineum. Cutaneous metastasis is a rare occurrence with an incidence of only 2.0%. We present a case of metastatic pancreatic adenocarcinoma manifesting itself through subcutaneous involvement.

Case Report

- 50-year-old male was undergoing outpatient evaluation for a scalp lesion along with neck nodules and an unintentional 30lb weight loss.
- Outpatient CT soft tissue neck revealed numerous soft tissue, rimenhancing necrotic collections in the neck along with an epidural collection in the C2-4 spinal canal. Occlusions of the left subclavian, brachiocephalic, and left internal jugular vein were also noted. The patient was referred to the ED.
- At time of ED arrival, CTA PE study showed no pulmonary embolism but revealed numerous pulmonary and bilateral adrenal nodules, multifocal liver and osseous lesions, and widespread lymphadenopathy.
- CT head demonstrated a left scalp soft tissue lesion. Follow up CT abdomen/pelvis revealed a 2.8 x 2.2 x 1.8 cm ill-defined pancreatic lesion and confirmed widespread metastasis including to the muscles.
- Cancer markers revealed a Cancer antigen 19-9 (CA 19-9) of 5418
 U/mL and carcinoembryonic antigen (CEA) of 63.8 ng/mL.
- Pathology from initial scalp lesion biopsy showed fragments of necrotic dermis with small foci of poorly differentiated carcinoma. Biopsy of a right and left neck mass revealed poorly differentiated adenocarcinoma of uncertain primary. Therefore, liver biopsy was performed and confirmed non-small cell carcinoma of pancreatobiliary origin.
- Further imaging to determine treatment course discovered intracranial metastasis and cervical spine disease resulting in cord compression. Ultimately, the patient underwent 4 out of 10 fractions of palliative radiation to the cervical spine but passed away after transitioning to comfort care 1 month after diagnosis.

Images:



Axial contrast enhanced CT of the abdomen shows a 2.8 cm ill-defined hypoattenuating mass in the pancreatic tail (A) with multifocal metastatic liver lesions and bilateral adrenal metastasis (B). Axial CT image of the pelvis shows a metastatic lesion in the right rectus femoris muscle (C). On liver biopsy, H&E, 40X,(S21-41666) revealed high grade carcinoma with vesiculated nuclei, prominent nucleoli (D), CA 19-9 IHC 20X diffuse positivity in tumor cells (E) and CK AE1/3 IHC, 20X, diffusely positivee for pancytokeratin in tumor cells confirming carcinoma (F). Axial CT of the head shows a 2.4 cm nodular left parietal scalp soft tissue lesion (G) which was also seen on clinical examination (H). Biopsy of the scalp lesion (H&E, 40X) demonstrated high grade carcinoma with vesiculated nuclei, prominent nucleoli and mitoses (I), histologically similar to liver biopsy.

Conclusion:

- There are less than 25 documented cases of pancreatic cancer with cutaneous involvement; however, it is even more rare that cutaneous involvement prompts initial diagnosis.
- The umbilicus is the most common site of cutaneous involvement. Involvement of the soft tissue of the scalp and neck is much less common and poorly documented making this case extremely unique.

References:

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