Colonic mass with a positive positron emission tomography, is it a malignant lesion?

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## Abstract

Colonic malignancy generally presents as a mass lesion and lights up on positive positron emission tomography (PET) scan. Crohn's Disease (CD) leads to transmural inflammation that can present as a colonic mass with a positive PET that can mimic malignancy. Early treatment improves outcomes.

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## Abstract

Colonic malignancy generally presents as a mass lesion and lights up on positive positron emission tomography (PET) scan. Crohn's Disease (CD) leads to transmural inflammation that can present as colonic mass with a positive PET, mimicking malignancy. Early treatment improves outcomes.

**Keywords:** Crohn's Disease, colon mass, positive PET scan

**Key clinical message:** Crohn's Disease (CD) leads to transmural inflammation that can present as a colonic mass with a positive PET mimicking malignancy.

## Introduction

A 44 years-old-male with history of nephrolithiasis was referred by urology for colo-vesical fistula seen on cystoscopy and a computerized tomographic (CT) scan showing a cecal mass concerning for malignancy. Patient had no gastrointestinal symptoms. His initial colonoscopy revealed a large, circumferential, non-obstructive polypoid mass at cecum and ulcers at terminal ileum. Pathology revealed chronic inflammation with granulation tissue (Figure-1a, 1b). Positron emission tomography (PET) scan showed hypermetabolic activity in cecum and terminal Ileum (Figure-2). CT enterography revealed terminal ileal inflammatory changes. His repeat Colonoscopy and biopsy did not reveal any colonic malignancy. His laboratory tests were significant only for elevated fecal calprotectin, otherwise unremarkable. In light of the clinical parameters, he was diagnosed with fistulizing Crohn's Disease (CD). He refused treatment with biological agents, hence was treated with Budesonide and Azathioprine. Repeat colonoscopy after six months showed significant improvement of the inflammatory mass (Figure-3).

The transmural inflammation and edema in CD, can manifest as a colonic mass with luminal narrowing[1]. Patients with CD with active inflammation can often have positive PET scan and can be confused with malignancy[2]. Negative colonic biopsy for malignancy and interval improvement in colonoscopy findings after treatment for are key to diagnosis in our patient.

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Authors contributions:

Elona Shehi MD managed the patient and wrote the manuscript.

Bhavna Balar MD managed the patient and critically reviewed the manuscript and the images.

Harish Patel MD wrote the manuscript and critically reviewed the manuscript and the images.

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