Formation of asymptomatic intraabdominal and intrafascial heterotopic ossificans following repeated abdominal surgeries: Case report

Gurigbal Bhullar DO '24/MHA '251, Hutton White MD2

Background: This case study discusses a rare case of abdominal heterotopic ossification (HO).

<u>Clinical case:</u> Middle-aged man presented for an elective colostomy reversal. He had an extensive surgical history including open sigmoid resection for recurrent diverticulitis with primary umbilical hernia repair, and subsequent resection of anastomosis, additional washouts, and eventually an ostomy formation for a perforated anastomotic site. Now, he felt well and desired a colostomy reversal. Incidentally during the colostomy reversal, at least 30 separate pieces of heterotopic bone formation were encountered within the interloop spaces and removed from the patient's abdomen, some of which were excess of 10cm x 10cm in size. Seven months after the reversal, only a single area of ossification was present towards the upper aspect of the fascia.

Clinical lesson: HO can present as early as two weeks post abdominal surgery (1) and may lead to obstructive symptoms (2). There have been cases of more serious consequences like jejunal perforation post fall in patient with HO (3). Our patient was asymptomatic. The etiology of HO is multifactorial and surgery remains as the primary treatment option with evidence for benefit with early intervention, but some authors recommend delayed intervention to reduce HO recurrence (4). Although other treatment options are available in the orthopedic world, prophylactic NSAIDs, radiation therapy, and bisphosphonates are not recommended for abdominal heterotopic ossification (5). Open abdomen can be a possible risk factor for the development of heterotopic ossification which has been reported by another similar case of HO (2).

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¹ Des Moines University, Des Moines, Iowa

² General Surgery, Ascension Genesys Hospital, Grand Blanc, Michigan