Dome-Type Carcinoma of the Ascending Colon: A Case Report

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Dome-Type Carcinoma of the Ascending Colon: A Case Report

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BACKGROUND

• Dome-type carcinoma (DC) is a rare clinical entity first described by De Petris et al in 1999 followed by Jass et al in 2000.
• The tumor is described as a focus of adenocarcinoma contained within dense lymphoid stroma associated with dome type epithelium.
• Herein we report the endoscopic and pathologic findings in a case of Dome-type carcinoma in order to add to the limited number of documented cases.

CASE PRESENTATION

• An asymptomatic 78 year old male with a prior personal history of four tubular adenomas was found to have three broad-based polyps on routine surveillance colonoscopy.
• Pathology showed prominent lymphoid aggregates with nests of invasive adenocarcinoma that were well to moderately differentiated and contained no goblet cells.
• The findings were confined to the superficial submucosa.
• The final pathologic features were consistent with the typical appearance of dome-type carcinoma.
• The patient subsequently underwent an uncomplicated right hemicolectomy with an uneventful post-operative recovery.

CONCLUSION

• Dome-type carcinoma is a distinct variant of colorectal carcinoma with dense lymphoid component but devoid of microsatellite instability or EBV infection.
• The tumor is felt to arise from M cells associated with the follicle-associated epithelium of gut-associated lymphoid tissue within the colon.
• This assumption comes from the lack of goblet cells and the association with lymphoid tissue.
• Nearly all cases are low grade with excellent prognosis without recurrence.
• To our knowledge our reported case appears to be the only case found in a patient without abdominal complaints or a family history of colorectal carcinoma, as most patients have one or both findings.
• Through this case report we hope to bring further attention to this distinct clinical entity while adding another case to the current body of literature.

References:


• Dome-type carcinoma is a distinct variant of colorectal carcinoma with dense lymphoid component but devoid of microsatellite instability or EBV infection.

Figure 1: Finding on routine surveillance colonoscopy.

Figure 2: Lower power view of metastatic focus of adenocarcinoma present within a lymphoid aggregate of the submucosa (“domic carcinoma”).

Figure 3: High power view of metastatic focus of adenocarcinoma.