Clinical Case Report

RENAL VEIN CAVERNOUS HEMANGIOMA – RESECTION AND GRAFTING WITH INTERNAL JUGULAR VEIN

HEMANGIOMA CAVERNOSO DE VEIA RENAL – RESSECÇÃO E ENXERTO COM VEIA JUGULAR INTERNA

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ABSTRACT

Cavernous hemangioma of the renal vein is an exceptionally rare condition characterized by the presence of a vascular tumor within the renal vein. Limited information is available regarding its clinical features, prevalence, and treatment options. We present the case of a 67-year-old male with gastric adenocarcinoma who underwent staging imaging revealing an incidental finding of a neoformation within the left renal vein. The patient underwent radical total gastrectomy with excision of the renal vein lesion, followed by reconstruction using the internal jugular vein. Histopathological examination confirmed tubular gastric adenocarcinoma and a cavernous hemangioma involving the renal vein wall. The patient was followed in the medical oncology consultation for gastric cancer. At the 10-month follow-up, the patient remains clinically well, with no evidence of recurrence of either the gastric adenocarcinoma or renal vein hemangioma cavernosum. This case highlights the extremely rare incidental discovery of a renal vein hemangioma cavernosum during gastric cancer staging. Surgical excision with vein reconstruction proved to be a safe and effective treatment option. Further research is needed to establish optimal management strategies for this rare condition.

Keywords: *cavernous hemangioma; vascular neoplasms; renal vein; vascular grafting.*

RESUMO

O hemangioma cavernoso da veia renal é uma condição excepcionalmente rara caracterizada pela presença de um tumor vascular no interior da veia renal. Informações limitadas estão disponíveis sobre suas características clínicas, prevalência e opções de tratamento. Apresentamos o caso de um homem de 67 anos com adenocarcinoma gástrico que foi submetido a exames de imagem que revelaram achado incidental de neoformação na veia renal esquerda. O doente foi submetido à gastrectomia total radical com excisão da lesão da veia renal, seguida de reconstrução com veia jugular interna. O exame histopatológico confirmou adenocarcinoma gástrico tubular e hemangioma cavernoso envolvendo a parede da veia renal. O doente foi acompanhado na consulta médica de oncologia por cancro gástrico, No seguimento de 10 meses, o doente permanece clinicamente bem, sem evidência de recorrência do adenocarcinoma gástrico ou do

hemangioma cavernoso da veia renal. Este caso destaca a descoberta incidental extremamente rara de um hemangioma cavernoso da veia renal durante o estadiamento do câncer gástrico. A excisão cirúrgica com reconstrução venosa mostrou-se uma opção de tratamento segura e eficaz. Mais pesquisas são necessárias para estabelecer estratégias de manejo ideais para esta condição rara.

Palavras-chave: *hemangioma cavernoso; neoplasias vasculares; veia renal; enxerto vascular.*

INTRODUCTION

Cavernous hemangioma is a rare type of vascular tumor composed of dilated blood vessels. When it occurs in the renal vein, it can lead to the formation of a mass or localized swelling within it. However, as mentioned earlier, this condition is exceptionally rare, and there is limited information available regarding its clinical features, prevalence, and treatment options.

MATERIAL AND METHODS

A 67-year-old male was referred to our institution after being diagnosed with gastric adenocarcinoma during an upper gastrointestinal endoscopy due to complaints of dyspepsia and early satiety. Staging computed tomography revealed no suspicious metastatic lesions, but an incidental finding of a neoformation within the left renal vein was noted. The patient underwent radical total gastrectomy with Roux-en-Y reconstruction and excision of the lesion in the left renal vein (Figures 1 and 2).

Reconstruction of the renal vein was performed using the right internal jugular vein (Figure 3).

The patient had an uneventful postoperative course and was discharged on the tenth day of hospitalization.

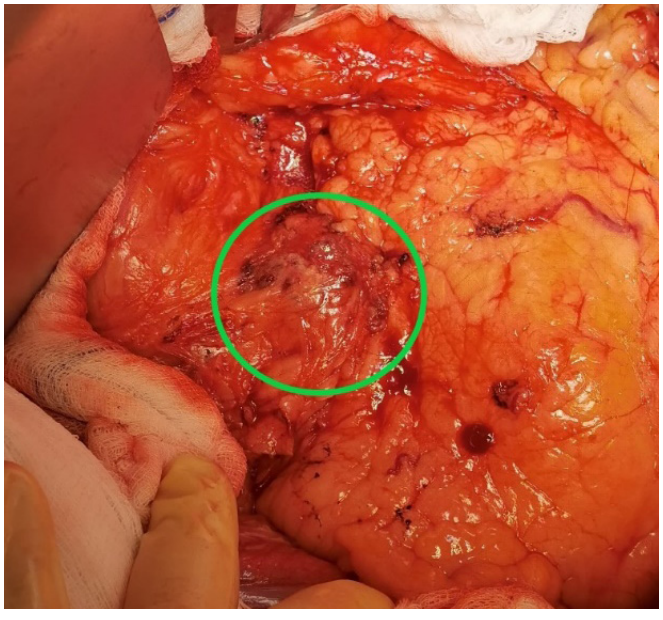

FIGURE 1 – **Renal vein tumor marked with a green circle.**

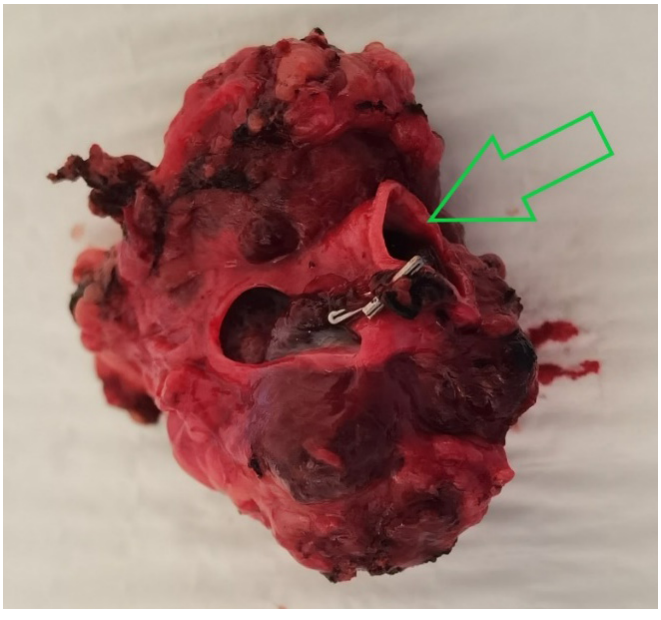

FIGURE 2 – **Hemangioma cavernosum of the left renal vein (green arrow) ressected.**

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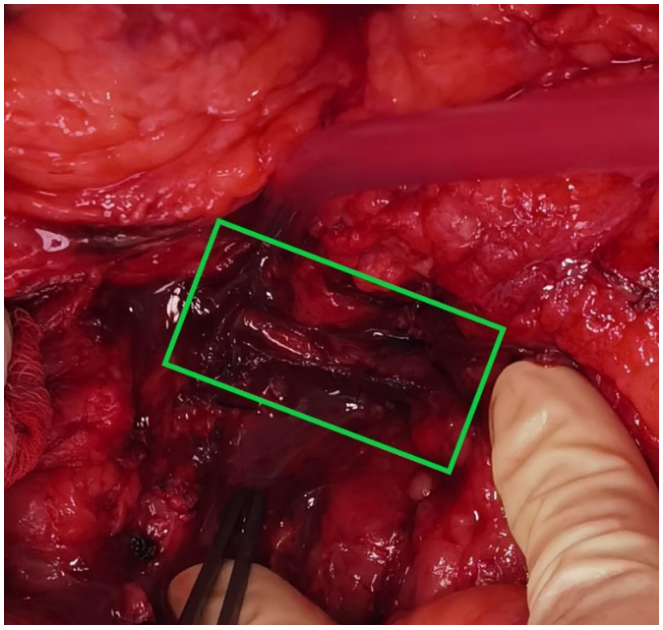

FIGURE 3 – **Right internal jugular vein (green rectangle) grafted in place of the renal vein ressected.**

RESULTS

Histopathological examination of the resected specimen showed a tubular gastric adenocarcinoma with infiltrative invasion into the subserosal layer but without surpassing it. Lymphatic invasion was observed, while perineural invasion was absent. The surgical margins were clear, and the tumor was staged as pT3N1 (1/68), R0. Additionally, a histological examination of the renal vein lesion revealed a cavernous hemangioma involving the wall of the vein.

In a multidisciplinary team meeting, it was decided to follow the patient in the medical oncology consultations for gastric cancer follow-up. As the renal lesion was confirmed to be benign, sarcoma-specific follow-up was not deemed necessary. At the 10-month follow-up, the patient remains clinically well, with no renal function impairment and, no evidence of recurrence of either gastric adenocarcinoma or renal vein hemangioma cavernosum.

DISCUSSION AND CONCLUSIONS

This case report underscores the incidental discovery of a cavernous hemangioma within the left renal vein during staging imaging for gastric adenocarcinoma. Given the scarcity of information, the management of hemangioma cavernosum of the renal vein would likely depend on various factors, including the patient's symptoms, the size and location of the lesion, and potential associated complications. Treatment options may involve surgical intervention to remove the tumor or embolization procedures to block the blood supply to the hemangioma.

In this case, surgical excision of the renal vein hemangioma cavernosum, with subsequent reconstruction proved to be a safe and effective procedure, thus establishing it as a validated treatment option.

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