

## A Metachronous Pancreatic Metastasis of a Clear Cell Renal Carcinoma, Case Report and Literature Review

A. Debbagh<sup>1\*</sup>, K. Alaoui Slimani<sup>1</sup>, Y. Sbitti<sup>1</sup>, R. Tanz<sup>1</sup>

<sup>1</sup>Medical Oncology Service, Instruction Military Hospital Mohamed V, Rabat

DOI: <https://doi.org/10.36347/sjmcr.2024.v12i12.033>

| Received: 06.11.2024 | Accepted: 14.12.2024 | Published: 20.12.2024

\*Corresponding author: A. Debbagh

Medical Oncology Service, Instruction Military Hospital Mohamed V, Rabat

### Abstract

### Case Report

**Introduction:** Pancreatic metastases are rare (2 to 3% of pancreatic tumors) [1]. Among them, metastases pancreatic kidney cancers have a specific diagnostic, prognostic and therapeutic particularity. We report the case of a patient who presented with a pancreatic tumor revealing renal carcinoma. **Case Report:** 60-year-old patient operated on ten years ago for nephrectomy related to renal cell carcinoma. She currently presents with a pancreatic tumor whose biopsy is related to pancreatic metastasis of clear cell renal cell carcinoma. **Conclusion:** pancreatic metastases from clear cell adenocarcinomas of the kidney are rare and may occur several years after nephrectomy. They are often accessible to curative surgical treatment allowing good long-term survival.

**Keywords:** Pancreatic Metastasis, Renal Cell Carcinoma, Clear Cell Carcinoma, Pancreatic Surgery, Long-term Survival.

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

## INTRODUCTION

Pancreatic metastases are rare (2 to 3% of pancreatic tumors) [1]. Among them, metastases pancreatic kidney cancers have a specific diagnostic, prognostic and therapeutic particularity. We report the case of a patient who presented with a pancreatic tumor revealing renal carcinoma.

## CLINICAL CASE

60 year old patient without atecedent operated for kidney carcinoma ten years ago benefiting from a left nephrectomy; the patient presented with abdominal pain evolving in a context of change in general condition; the clinical examination found a OMS : 2 with ABDOMINAL pain A and unremarkable clinical examination; a radiological assessment carried out in particular a thoracoabdominopelvic CT revealed a pancreatic tumor without vascular invasion; with normal biological assessment and normal ca19 9; an ultrasound-guided biopsy was done and the pathological study revealed a pancreatic metastasis of a clear cell renal carcinoma **figure 1**; after multidisciplinary consultation with surgeons and radiotherapists, we proceeded to complete surgical excision of the lesion given the absence of constraints of operability or resectability; and we opted for strict monitoring after one year follow-up,

the patient is doing well and the control results are completely normal.

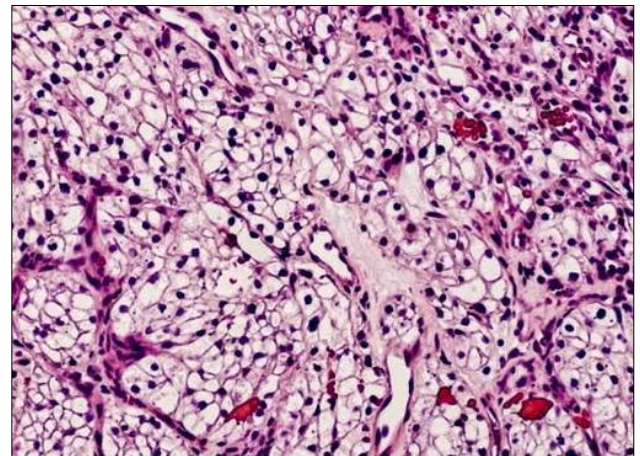


Figure 1: pancreatic metastatic of clear cell carcinoma of kidney

## DISCUSSION

The frequency of pancreatic metastases is different depending on the circumstances of discovery. In autopsy series, the pancreas is the site of metastases in 3% [2], in 10.6% of cases [3]. The main primary tumors also vary depending on the case: in autopsy series [2, 3], we find, in order of frequency, cancers of the breast,

bronchi then thyroid and melanomas. On the other hand, kidney cancers the most common in clinical series (30%), followed by bronchial cancers (small and large cells) (23%), breast cancers (12%) and soft tissue sarcomas (8%) [4]. Other primary tumors are rare: colon cancer in particular in its location right, rectal cancer, melanomas, lymphomas, hepatocellular carcinoma and thyroid cancer with regard to pancreatic metastases from kidney cancers, the time between nephrectomy and the discovery of the metastasis can be significant, from 10 years in average [5], which is the case of our patient. Metastatic dissemination to the pancreas could occur via the lymphatic route, lymphatic pathways connecting the head of the pancreas to the dorsal surface of the renal arteries having been demonstrated [6], or via the venous route via pre-existing portacaval shunts or secondary to the kidney tumor [7]. These metastases are asymptomatic in 50% of cases then discovered during surveillance radiological examinations [1]. Only biopsy puncture by percutaneous or endoscopic examination of the lesion can allow a certain histological diagnosis, but this examination is not in current practice [8]. The treatment of pancreatic metastases requires resections, most often major, the type of which depends on of the topography of the lesion. A cephalic duodenopancreatectomy or a left pancreatectomy are most often necessary [9, 10]. The multiple character of Metastases may require subtotal pancreatectomy [11]. Pancreatic metastases from kidney cancer may recur in the remaining pancreas, and total pancreatectomy may then be necessary. Portal *et al.* reported the observation of a patient with metastases appearing in the head of the pancreas with a delay of 6 years and in the tail with a delay of 11 years after a right nephrectomy [12]. In another study, a patient who had a midline pancreatectomy developed extra-pancreatic metastases then a cephalic and caudal intrapancreatic recurrence 75 months after the pancreatectomy [13]. Some authors opt for pancreatic resection limited to the tumor by performing atypical pancreatectomies in order to preserve as much healthy parenchyma as possible, under the cover of an extemporaneous examination of the section slices [14], which was the case in our patient. This tactic does not prevent the occurrence of pancreatic fistulas, and does not seem to modify either the frequency of recurrences or survival [14]. Furthermore, the performing a lymph node dissection does not seem to bring any benefit [10]. In our series, no lymph node invasion was observed in the six patients who had a pancreatectomy. Good prognostic factors appear to be: a long time separating nephrectomy from the diagnosis of metastasis, a single or minimally symptomatic pancreatic lesion, or a radiological appearance of central necrosis of the lesion [10-16].

## CONCLUSION

pancreatic metastases from clear cell adenocarcinomas of the kidney are rare and may occur several years after nephrectomy. They are often accessible to curative surgical treatment allowing good

long-term survival. These metastases should be detected by an abdominal CT scan periodic assessment made in the surveillance assessment of cancer of the kidney operated, in order to be able to offer surgical treatment which seems likely to prolong survival. Their prognosis is much better than that of primary adenocarcinomas when complete surgical resection is possible.

## REFERENCES

1. FAURE, J. P., TUECH, J. J., RICHER, J. P., PESSAUX, P., ARNAUD, J. P., & CARRETIER, M. (2001). Pancreatic metastasis of renal cell carcinoma: presentation, treatment and survival. *The Journal of urology*, 165(1), 20-22.
2. Willis, R. A. (1975). *The spread of the human body*. New York: Butterworths & Co, 276.
3. Cubilla, A. L., & Fitzgerald, P. J. (1980). Surgical pathology of tumors of the exocrine pancreas. In: Loosa AR, editor. *Tumors of the pancreas*. Baltimore: Md: Williams & Wilkins, 159–93.
4. Klein, K. A., Stephens, D. H., & Welch, T. J. (1998). CT characteristics of metastatic disease of the pancreas. *Radiographics*, 18(2), 369-378.
5. Robbins, E. G., Franceschi, D., & Barkin, J. S. (1996). Solitary metastatic tumors to the pancreas: a case report and review of the literature. *American Journal of Gastroenterology (Springer Nature)*, 91(11).
6. Nagakawa, T., Konishi, I., Ueno, K., Ohta, T., & Kayahara, M. (1993). A clinical study on lymphatic flow in carcinoma of the pancreatic head area--peripancreatic regional lymph node grouping. *Hepato-gastroenterology*, 40(5), 457-462.
7. Saitoh, H., Yoshida, K. I., Uchijima, Y., Kobayashi, N., Suwata, J., & Nakame, Y. (1991). Possible metastatic routes via portacavalshunts in renal adenocarcinoma with liver metastasis. *Urology*, 37(6), 598-601.
8. Klein, K. A., Stephens, D. H., & Welch, T. J. (1998). CT characteristics of metastatic disease of the pancreas. *Radiographics*, 18(2), 369-378.
9. Robbins, R. G., Franceschi, D., & Barkin, J. S. (1996). Solitary metastatic tumors to the pancreas : a case report and review of the literature. *Am J Gastroenterol*, 91, 2414–7. 530 F. Peschard / *Annales de Chirurgie* 127 (2002) 527–531
10. Le Borgne, J., Partensky, C., Glemain, P., Dupas, B., & De Kerviller, B. (2000). Pancreaticoduodenectomy for metastatic ampullary and pancreatic tumors. *Hepato-gastroenterology*, 47(32), 540-544.
11. Guyenne, C., Rat, P., Haas, O., Baudet, J. G., & Favre, J. P. (1989). Triple metastase pancreatique d'un cancer du rein traitee par duodenopancreatectomie subtotale. *La Presse medicale* (1983), 18(5).
12. Portal, I., Barthet, M., Alemy, M., Payan, M. J., Sastre, B., & Sahel, J. (1992). Métastases pancréatiques récidivantes d'un hypernéphrome. *La Presse medicale*, 21(38), 1822-1822.

13. De Clavière, G., Paye, F., Fteriche, S., Terris, B., Belghiti, J., & Sauvanet, A. (2002, January). Pancreatectomie mediane: resultats d'une serie de 11 patients. In *Annales de chirurgie* (Vol. 127, No. 1, pp. 48-54). Elsevier Masson.
14. Stankard, C. E., & Karl, R. C. (1992). The treatment of isolated pancreatic metastases from renal cell carcinoma: a surgical review. *American Journal of Gastroenterology (Springer Nature)*, 87(11).
15. Germain, M., Larrieu, H., Martin, E., & Chaput, J. C. (1976). Les cancers secondaires du pancréas. *Ann Chir*, 30, 613–9.
16. Hashimoto, M., Watanabe, G., Matsuda, M., Dohi, T., & Tsurumaru, M. (1998). Management of the pancreatic metastases from renal cell carcinoma: report of four resected cases. *Hepato-gastroenterology*, 45(22), 1150-1154.