



# Synchronous pancreas and gallbladder cancer with concomitant alopecia totalis

Saket Kumar , Abhijit Chandra 

Department of Surgical Gastroenterology, King George's Medical University, Lucknow, India

## ABSTRACT

A 55-year-old female presented with history of pain in the right hypochondrium along with complete loss of facial and scalp hair over last two months. On evaluation, she was found to have locally advanced, synchronous malignancies of the gallbladder and head of the pancreas. Synchronous malignancy of gallbladder and pancreas is in itself very rare and less than 10 such cases have been reported in the world literature. Alopecia totalis has been classically associated with various autoimmune disorders. However, alopecia totalis as a presenting feature of any abdominal malignancy has never been reported in the medical literature. The present report describes a rare association of synchronous pancreatobiliary malignancies with strange clinical presentation.

**Keywords:** Alopecia totalis, synchronous, pancreatobiliary, malignancy

## INTRODUCTION

Synchronous dual malignancy of gallbladder and pancreas is extremely rare and only a handful of cases have been reported till date (1). The usual manifestations of pancreatobiliary malignancy include pain, jaundice, anorexia, cholangitis and duodenal obstruction. Intraabdominal malignancy presenting with alopecia has never been reported in the medical literature so far. Alopecia totalis (AT) affects 1.7% of general population and is characterized by severe loss of scalp as well as facial hair. The exact etiology remains unknown, but immunological factor has been implicated in most of the cases (2,3). We describe a rare case of synchronous dual pancreatobiliary malignancy with odd presentation of alopecia totalis. To the best of our knowledge, this is the first report describing concomitant alopecia totalis in the background of abdominal malignancy in humans.

## CASE REPORT

A 55-year-old lady presented with complaints of abdominal pain and total loss of scalp and facial hair since two months. She also had long-standing history of dyspepsia and post-prandial abdominal bloating. She was primarily evaluated at another hospital one year back and was diagnosed to have chronic calculus cholecystitis on abdominal ultrasound examination. She was advised to undergo cholecystectomy. However, her symptoms resolved with medications and she was lost to follow up. Over last two months she developed mild to moderate intensity, non-colicky pain in her right hypochondrium, requiring oral analgesics. She also has been suffering from anorexia and weight loss of five kg since last three months. She described rapid hair fall starting two months back and resulting in complete loss of facial and scalp hair over a short duration of 20 days (Figure 1).

General examination of the patient was non-contributory and abdominal palpation revealed a vague, non-tender gallbladder mass. There was total loss of scalp and facial hair though the skin appeared normal. There was no sign of any fungal infection or cutaneous metastasis.

Her laboratory tests revealed a normal complete blood count and normal liver function except a mildly elevated alkaline phosphatase level (340 IU/L). Her kidney function and thyroid profile were also within normal range. A computed to-

**Cite this article as:** Kumar S, Chandra A. Synchronous pancreas and gallbladder cancer with concomitant alopecia totalis. Turk J Surg 2023; 39 (2): 169-172.

### Corresponding Author

Saket Kumar

E-mail: krsaketsingh@gmail.com

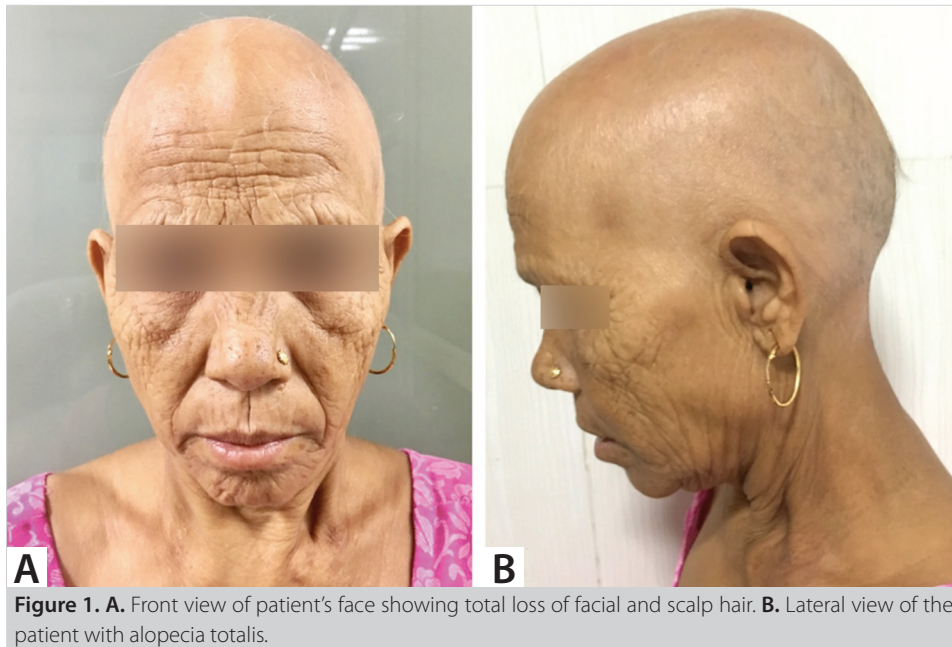
Received: 04.02.2019

Accepted: 25.11.2019

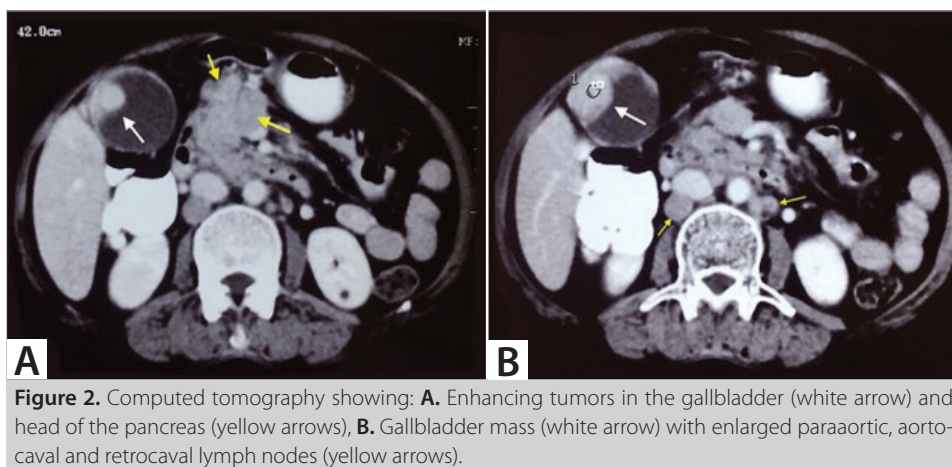
Available Online Date: 19.06.2023

© Copyright 2023 by Turkish Surgical Society Available online at [www.turkjsurg.com](http://www.turkjsurg.com)

DOI: 10.47717/turkjsurg.2022.4457



**Figure 1. A.** Front view of patient's face showing total loss of facial and scalp hair. **B.** Lateral view of the patient with alopecia totalis.



**Figure 2.** Computed tomography showing: **A.** Enhancing tumors in the gallbladder (white arrow) and head of the pancreas (yellow arrows), **B.** Gallbladder mass (white arrow) with enlarged paraaortic, aortocaval and retrocaval lymph nodes (yellow arrows).

mography (CT) scan of her abdomen was done, which showed an ill-defined, heterogeneously enhancing growth in the body of gallbladder and other bulky mass in the head of pancreas. Multiple paraaortic, aortocaval and retrocaval lymph nodes were enlarged. The lymph nodal mass was seen encasing the coeliac trunk, common hepatic artery, superior mesenteric vein and portal vein (Figure 2). Percutaneous fine needle aspiration cytology done separately from gallbladder and pancreatic head mass was consistent with adenocarcinoma.

In view of locally advanced nature of malignancy, she was planned to undergo palliative therapy. Her disease progressed despite receiving palliative chemotherapy and she died of advanced malignancy three months after diagnosis. Alopecia persisted till the end of her life.

## DISCUSSION

Synchronous malignancy of gallbladder and pancreas is of extreme rarity. To the best of our knowledge, less than ten cases have been reported worldwide (1). This is the first case of this rare synchronous malignancy from India. Incidence of gallbladder malignancy in north Indian population is among highest in the world. Chronic calculus cholecystitis is a well-known risk factor for development of gallbladder malignancy. Our patient also had long-standing cholecystitis, which might have led to malignant transformation in the gallbladder. However, there was no identifiable risk factor for development of pancreatic malignancy in our patient. Congenital conditions like choledochal cysts and abnormal pancreaticobiliary duct junction (APBDJ) that are associated with pancreatobiliary carcinogenesis, were not present in our patient (4,5). Genetic analysis to look for mutations predisposing to pancreatic malignancies was not done in our patient.

The usual presentations of pancreatobiliary malignancy include abdominal pain, jaundice, anorexia and weight loss (4). However, AT has never been reported as a presenting feature of any abdominal malignancy. Alopecia is usually associated with autoimmune conditions such as thyroid disease, lupus, pernicious anemia and ulcerative colitis (5). However, our patient didn't have any active autoimmune disease. She was non-diabetic and her thyroid function tests were normal. There was no history of chronic liver or kidney disease. Her complete blood counts and mean corpuscular volume were within normal range, excluding pernicious anemia as the cause for hair loss.

In some patients, alopecia can have familial causes as well. However, there was no history of alopecia totalis in any of her first- or second-degree female relatives. Excruciating pain associated with malignancy can also result in alopecia in some cases. But it is an unlikely cause for hair loss in our patient as the intensity of pain was mild to moderate only and was well controlled with analgesics. The AT in our patient may be only attributed to paraneoplastic syndrome associated with gallbladder malignancy. Few cases of severe alopecia have been reported in patients with lymphoma, but there is no report of AT as a presenting complaint in any intraabdominal malignancy (6-8). The mechanism behind this paraneoplastic process is not yet fully understood. The prognosis of AT is usually poor the chance of full hair regrowth is known to be less than 10%. As our patient was planned to undergo chemotherapy for malignancy, no specific treatment was given for hair regrowth (9).

The management of pancreatobiliary malignancy depends on the stage of the tumor (4). Complete surgical resection remains the most effective option for patients with localized disease (5, 10). However, most patients already have advanced malignancy at the time of diagnosis, and such patients are managed with palliative or investigational therapy.

## CONCLUSION

We report the first case of AT in a patient of locally advanced synchronous dual pancreatobiliary malignancy. Though the exact etiology remains unknown, paraneoplastic phenomenon might have led to rapid and complete hair loss in our patient.

**Peer-review:** Externally peer-reviewed.

**Author Contributions:** Concept - SK, AC; Design - SK, AC; Supervision - SK, AC; Materials - SK, AC; Data Collection and/or Processing - SK, AC; Analysis and/or Interpretation - SK, AC; Literature Search - SK, AC; Writing Manuscript - SK, AC; Critical Reviews - SK, AC.

**Conflict of Interest:** The authors have no conflicts of interest to declare.

**Financial Disclosure:** The authors declared that this study has received no financial support.

## REFERENCES

1. Rungsakulkij N, Boonsakan P. Synchronous gallbladder and pancreatic cancer associated with pancreatobiliary maljunction. *World J Gastroenterol* 2014; 20(39): 14500-4. <https://doi.org/10.3748/wjg.v20.i39.14500>
2. Lazzarini R, Caparelli GC, Buense R, Lellis RF. Alopecia universalis during treatment with leflunomide and adalimumab. *An Bras Dermatol* 2014; 89: 320-2. <https://doi.org/10.1590/abd1806-4841.20142944>
3. Cassano N, Amerio P, D'Ovidio R, Vena GA. Hair disorders associated with autoimmune connective tissue diseases. *G Ital Dermatol Venereol* 2014; 149: 555-65.
4. Kapoor VK, Mc Michael AJ. Gallbladder cancer: An 'Indian' disease. *Natl Med J Ind* 2003; 16: 209-13.
5. Carriaga MT, Henson DE. Liver, gallbladder, extrahepatic bile ducts, and pancreas. *Cancer* 1995; 75: 171-90. [https://doi.org/10.1002/1097-0142\(19950101\)75:1+<171::AID-CNCR2820751306>3.0.CO;2-2](https://doi.org/10.1002/1097-0142(19950101)75:1+<171::AID-CNCR2820751306>3.0.CO;2-2)
6. Gong J, Lim SW. Alopecia areata as a paraneoplastic syndrome of Hodgkin's lymphoma: A case report. *Mol Clin Oncol* 2014; 2(4): 596-8. <https://doi.org/10.3892/mco.2014.274>
7. Ramot Y, Güral A, Zlotogorski A. Alopecia areata as a manifestation of systemic lymphoma: Report of two cases. *Skin Appendage Disord* 2016; 2(1-2): 63-6. <https://doi.org/10.1159/000448379>
8. Garg S, Mishra S, Tondon R, Tripathi K. Hodgkin's lymphoma presenting as alopecia. *Int J Trichology* 2012; 4(3): 169-71. <https://doi.org/10.4103/0974-7753.100085>
9. Kassira S, Korta DZ, Chapman LW, Dann F. Review of treatment for alopecia totalis and alopecia universalis. *Int J Dermatol* 2017; 56(8): 801-10. <https://doi.org/10.1111/ijd.13612>
10. Taçyıldız IH, Aban N, Boylu Ş, Bozdağ AD, Keleş C. Safra kesesi kanseri. *Turk J Surg* 1996; 12(3): 217-23.

**OLGU SUNUMU-ÖZET**

Turk J Surg 2023; 39 (2): 169-172

**Eşlik eden alopesi totalisi ile birlikte senkron pankreas ve safra kesesi kanseri**

Saket Kumar, Abhijit Chandra

King George's Üniversitesi Tıp Fakültesi, Cerrahi Gastroenteroloji Bilim Dalı, Lucknow, Hindistan

**ÖZET**

Elli beş yaşında kadın hasta, son iki aydaki tam fasiyal ve kafa derisi kıllarının kaybının yanı sıra sağ hipokondrium ağrısı şikayetiyle başvurdu. Değerlendirmede, safra kesesinin lokal ilerlemiş, senkronize malignitesi ve pankreas başı olduğu tespit edildi. Safra kesesi ve pankreasın eş zamanlı malignitesi kendi başına çok nadirdir ve dünya literatüründe bu gibi 10 vakadan daha az rapor edilmiştir. Alopesi, çeşitli otoimmün bozukluklarla klasik olarak ilişkilendirilmiştir. Bununla birlikte, herhangi bir abdominal malignitenin bir sunum özelliği olarak alopesi totalisi, tıbbi literatürde hiç bildirilmemiştir. Bu raporda, senkronize pankreatobiliyer malignitelerin ilginç bir ilişkisi tanımlanmaktadır.

**Anahtar Kelimeler:** Alopesi, senkron, pankreatobiliyer, malignite**DOI:** 10.47717/turkjsurg.2022.4457