

BEYOND BREAST CANCER: A RARE CASE OF TAMOXIFEN-INDUCED LIVER INJURY AND CIRRHOSIS

Introduction

Breast cancer is one of the most common cancers worldwide. Tamoxifen is an important medicine used to treat and prevent the return of hormone-sensitive breast cancer. It works by blocking the effect of oestrogen on breast tissue. Although it is generally effective, tamoxifen can sometimes affect the liver and may cause fatty liver, liver inflammation (steatohepatitis), and, in rare cases, cirrhosis. This case is the first case reported as tamoxifen-related steatohepatitis and cirrhosis in a male patient with breast cancer.

Case History

A 41-year-old man, with no previous major health problems, was diagnosed with left-sided breast cancer in 2019. He underwent removal of the left breast along with clearance of the lymph nodes in February 2022. His cancer was positive for oestrogen and progesterone receptors and negative for HER2neu. He subsequently received chemotherapy and radiotherapy and was started on tamoxifen.

After taking tamoxifen for six months, routine tests showed an increase in his liver enzymes. (AST, ALT) Tests for hepatitis B and C, as well as autoimmune liver diseases, were negative. He was neither overweight nor obese, with a weight of 67 kg and a BMI of 22.5 kg/m². He had no diabetes, high blood pressure, heart disease, history of alcohol consumption, or use of alternative

medicines.

An ultrasound showed fatty changes in the liver. FibroScan, a non-invasive test used to assess liver stiffness, showed severe liver fibrosis. A liver biopsy was therefore performed. It showed fatty liver with inflammation and scarring, along with changes suggestive of cirrhosis. As no other cause of liver damage was identified, tamoxifen was considered the most likely cause.

Tamoxifen was stopped, and the patient was switched to another form of hormone treatment using goserelin and an aromatase inhibitor. His liver functions are currently stable and he continues to be followed regularly in the outpatient clinic.

Discussion

Tamoxifen has significantly improved breast cancer treatment outcomes by reducing the chances of cancer recurrence and death. However, it can also cause liver-related side effects. Raised liver enzymes may occur in some patients, while more serious problems such as fatty liver, liver inflammation, and rarely cirrhosis can develop.

Tamoxifen may increase the production and storage of fat in liver cells while reducing the body's ability to break down fat. The risk may be higher in people who are obese or have diabetes. However, this case shows that serious liver injury can also occur in patients without these usual risk factors.



Conclusion

Fatty liver is very common and can be overlooked, while MASH & MAFLD may lead to mortality, so it should be carefully monitored. Regular monitoring of liver function and, when appropriate, liver imaging is important during long-term tamoxifen treatment. Early detection and timely change of treatment may help prevent further liver damage.

Consult with our Expert



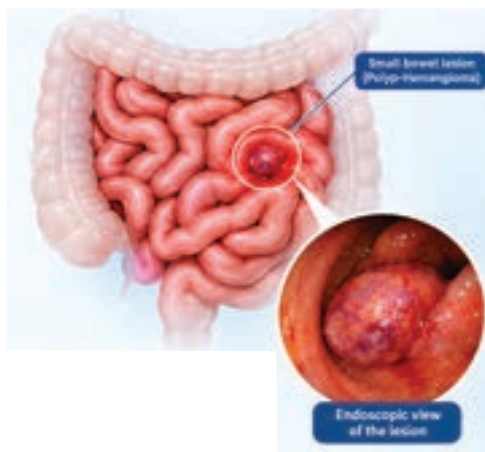
Dr. Shekhar Singh Jadaun

Senior Consultant,
Gastroenterology &
Hepatology

OPD Timing:
Mon, Wed & Fri
2 pm to 5 pm

Tue, Thurs & Sat
10 am to 2 pm

A HIDDEN CAUSE OF GASTROINTESTINAL BLEEDING: A RARE SMALL-BOWEL LESION



Black stools are often a sign of bleeding somewhere in the gastrointestinal tract, but finding the exact source can sometimes be challenging. This becomes even more difficult when the bleeding originates from the small intestine, an area that is not easily reached by routine endoscopy. Persistent gastrointestinal blood loss may lead to severe anaemia and can significantly affect a patient's health if the underlying cause remains unidentified.

This case highlights the importance of considering small-bowel lesions when the cause of gastrointestinal bleeding remains unexplained and demonstrates how timely investigation and multi-disciplinary management can lead to successful treatment.

Case Report

A 69-year-old man was admitted to Batra Hospital and Medical Research Centre with a history of black-coloured stools for around 20 days. The persistent nature of his symptoms raised concern for ongoing gastrointestinal blood loss.

On examination, he was conscious and oriented. His blood pressure was 110/80 mmHg, with a pulse rate of 88/minute and oxygen saturation of 100% on room air. Abdominal examination revealed a soft abdomen, with no significant abnormality detected clinically.

His blood investigations revealed severe anaemia, with haemoglobin values remaining markedly low during the hospital stay. He also had thrombocytopenia during the course of his illness.

Given the clinical presentation and laboratory findings, further investigations were undertaken to identify the source of bleeding.

Imaging of the abdomen revealed a small lesion in the mid-ileum, causing mild luminal compromise. In view of the suspected small-bowel source, double-balloon enteroscopy was performed, but the cause could not be diagnosed. As the source of bleeding remained unresolved and the patient continued to have significant blood loss, surgical intervention was considered necessary.

Therefore, an exploratory laparotomy was performed. The abnormal segment of the ileum was identified, and the lesion was removed along with the involved bowel segment. Resection of the affected intestine followed by anastomosis was performed.

Histopathological evaluation identified the lesion as an ileal telangiectatic polyp-hemangioma, providing an explanation for the patient's prolonged gastrointestinal blood loss and severe anaemia. The postoperative period was uneventful, and the patient was discharged.

Discussion

The small intestine can sometimes hide the source of gastrointestinal bleeding, making diagnosis particularly challenging. Unlike the upper and lower gastrointestinal tract, most of the small bowel cannot be easily visualised through conventional endoscopic procedures.

Vascular lesions can bleed because of their abnormal blood vessels and may present primarily with anaemia or overt gastrointestinal bleeding. In some patients, the bleeding may continue for an extended period before the underlying lesion is identified. When bleeding is persistent or the lesion cannot be adequately treated endoscopically, surgical removal of the involved bowel may be required.

The case also demonstrates the value of a multidisciplinary approach. Gastro-

enterology, surgery, radiology, medicine, and other supportive teams were involved in evaluating and managing the patient. When the source of bleeding is difficult to locate, combining different diagnostic approaches can be crucial in reaching the final diagnosis and selecting the appropriate treatment.

Conclusion

Persistent black stools and unexplained severe anaemia should not always be attributed to the more common causes of gastrointestinal bleeding. When routine evaluation does not identify the source, the small intestine should also be considered.

Vascular lesions such as an ileal telangiectatic polyp-hemangioma can remain hidden and may require advanced imaging, enteroscopy, and, in selected cases, surgical exploration. Early recognition and appropriate intervention can help control ongoing blood loss and prevent further complications.

This case reminds us that sometimes the source of a significant gastrointestinal bleed can be found in one of the most difficult parts of the gut to reach and that careful investigation, persistence, and teamwork can make all the difference.



Consult with our Expert



Dr. Amrit Yog Datley

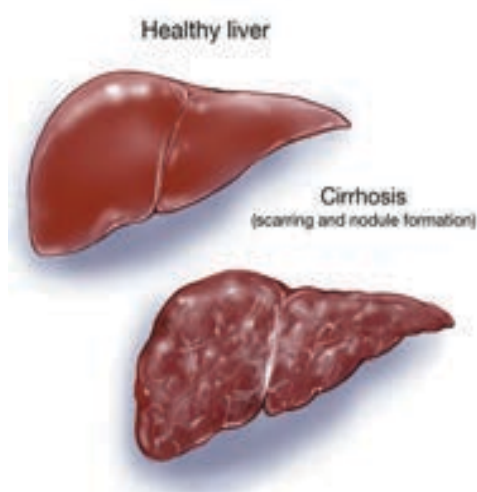
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ALCOHOL AND YOUR LIVER: UNDERSTANDING THE RISKS BEFORE IT'S TOO LATE



Alcohol affects every organ of body. Absorbed by stomach and intestines very rapidly into blood stream, it reaches every organ of body including brain where it acts as a depressant. Alcohol is metabolized by liver to harmless substances, however, liver can only metabolize a small amount of alcohol at a time, leaving the excess alcohol to circulate throughout the body. Hence the intensity of effect of alcohol on the body is directly proportional to the amount of alcohol consumed.

ALCOHOLIC LIVER DISEASE:

Since Liver is responsible for alcohol metabolism, it is obvious to have maximum tendency to get damaged by excessive consumption of alcohol landing up to Alcoholic Liver Disease.

It is a common, but preventable disease.

There are three primary types of alcohol induced liver diseases, including the following:

Fatty Liver: Fatty liver is excessive accumulation of fat inside the liver cells. It is most common alcohol induced liver disorder. Liver gets enlarged causing upper abdominal discomfort.

Alcoholic Hepatitis: It is an acute inflammation of liver, including destruction of liver cells, frequently followed by permanent scarring. Symptoms include fever, jaundice, weakness, loss of appetite, right sided abdominal pain and nausea. The Total Leukocyte Count tends

to increase and liver is enlarged and tender too.

Alcoholic Cirrhosis: It is destruction of liver tissue, leading to non functional scar tissue. Symptoms and signs, in addition

to those of alcoholic hepatitis, include portal hypertension (increased resistance to blood flow through the liver), enlarged spleen, ascites, kidney failure, confusion and may also lead to liver cancer.

Around 60-100% of heavy drinkers may suffer from fatty liver, among which 20-30% may progress to steatohepatitis of which around 10-15% of patients may suffer from cirrhosis.

Risk Factors:

Quantity of Alcohol: In Men, 40-80g/d of alcohol produces fatty liver; 160 g/d for 10-20 years causes hepatitis or cirrhosis

Gender: Women exhibit increased susceptibility to alcoholic liver disease.

Hepatitis B & C infection:

- Hepatitis B & C viruses are risk factors for Acute Liver Disease which develops at a younger age with more severe symptoms and degenerative effects, and a decreased chance of survival.
- Hepatitis C increases the risk of cirrhosis by 30 fold in heavy drinkers.

Genetics: Gene polymorphism may include alcohol dehydrogenase, cytochrome P4502E1 etc.

Drinking Pattern:

- Drinking outside of meal times increases the risk of ALD by 2.7 times
- Daily drinking carries more than twice the risk of liver damage compared with intermittent drinking once or twice per week
- Binge drinking dramatically increase the risk of developing ALD

Note: Gin, Rum, Vodka, Whisky contain approximately 40g of alcohol per 100 ml

When to refrain from drinking:

Drinking is a problem if it is causing trouble in your relationships, in college, in social activities, in professional work, or how you think and feel.

Pregnancy is a big no for drinking alcohol as it can affect fetal development and abnormalities.

Diagnosis: In addition to a complete medical history and physical examination, diagnostic procedures for alcohol induced liver disease may include the following:

Laboratory Tests - Liver Function Tests, Coagulation Profile, Alpha Fetoprotein, Complete Blood Count, Kidney Function Test and Viral Markers

Imaging - Ultrasound abdomen, Fibro-scan, CT abdomen triple phase and MRI

- UGI Endoscopy
- Liver Biopsy

Management & Treatment:

- Total abstinence remains the core (psychological & medical help) treatment
- Proper nutrition (protein rich high calorie diet)
- Liver Protective Agents- S-adenosyl methionine, UDCA, Vitamin E, Pentoxifylline
- Aggressive forms may require steroid therapy
- Prevention & Management of complications (Hepatorenal syndrome, Hepatic encephalopathy, Hepato-pulmonary Syndrome, Sepsis)
- Advanced liver disease requires Liver Transplant.

Consult with our Experts



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COMMUNITY OUTREACH



Batra Hospital conducted a **Multispeciality Health Camp on Cardiac & Ortho** on 12 July at Mandakini Apartment, Alaknanda, New Delhi



Batra Hospital conducted a **Health Camp on Orthopaedic** on 16 July at Sub Divisional Railway Hospital, Gonda, UP



Batra Hospital conducted a **Multispeciality Health Camp on Cardiac & Medicine** on 19 July at Godavari Apartment, Alaknanda, New Delhi



Batra Hospital conducted a **Health Camp on Medicine** on 26 July at Chirag Delhi, New Delhi



Batra Hospital conducted a **Health Checkup Camp on Medicine** on 8 Aug at Shiv Mandir, Magandir, New Delhi



Batra Hospital conducted a **Health Checkup Camp on Gynaecology & Orthopaedic** on 6 Sept. at Amar Colony, Lajpat Nagar, New Delhi

MORNING ACTIVITIES



Devli-Khanpur



Pushp Vihar



Tughlakabad Village



Sangam Vihar



Dakshinpuri



C.R. Park



Kalkaji DDA Flats



Pushp Vihar (Govt. Quaters)



Saket (Block J)



Dakshinpuri



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FOR APPOINTMENT

75-2013-2013