

bilaterally symmetrical distribution in arms and shins.⁵ Our case is unique because of its distinguishing arcuate and annular morphology, absence of symptoms and association with any preexisting condition. Moreover an unusual histopathological finding of basal cell degeneration along with very prominent pigment incontinence could not correlate with the clinically hypopigmented lesions. To the best of our knowledge we are reporting the first case of this unusual entity.

References

1. Jelinek JE, Bart RS, Schiff SM. Hypomelanosis of Ito ("incontinentia pigmenti achromians"). Report of three cases and review of the literature. *Arch Dermatol* 1973; **107**: 596-601. PMID: 4633268
2. David TJ. Hypomelanosis of Itô: a neurocutaneous syndrome. *Arch Dis Child* 1981; **56**: 798-800. PMID: 730542
3. Donnai D, Read AP, McKeown C, Andrews T. Hypomelanosis of Ito: a manifestation of mosaicism or chimerism. *J Med Genet* 1988; **25**: 809-18. PMID: 3236362
4. Whitehead WJ, Moyer DG, Vander Ploeg DE. Idiopathic guttate hypomelanosis. *Arch Dermatol* 1966; **94**: 279-81. PMID: 4951808
5. Costa OG. Progressive symmetrical leukopathia of the extremities. *Ann Dermatol Syphiligr* (Paris) 1951; **78**: 452-4. PMID: 14857424

Abhishek De*, **Ramesh Chandra Gharami, PK Datta****

*Department of Dermatology, Institute of Post Graduate Medical Education & Research, Kolkata, India

**Department of Dermatology, Medical College, Kolkata, India

Address for Corresponding

Dr. Abhishek De,
Flat No. C 14, 87B, Cossipore Road,
Kolkata 700002, India.
E-mail: dr_abhishek_de@yahoo.co.in

Widespread gangrene: dermatological complication in cirrhosis

Cirrhosis is a serious disorder of liver and leads to wide range of complications. Cutaneous complications are uncommonly reported though these can be serious in nature. We report one such case of cirrhosis of liver who developed widespread gangrene of skin spontaneously. This complication was managed but the patient succumbed to his primary disease.

A 36-year-old male patient suffering from Wilson's disease with cirrhosis of liver and generalized anasarca developed painful, erythematous lesions over lower anterior abdominal wall and both thighs. The lesions deteriorated and within 4 days turned into wide gangrenous patches (**Figure 1** and **2**). There were no systemic features of toxemia like fever. Debridement was done and the raw areas were closed primarily and partly reconstructed with split thickness skin grafts. The excised specimens showed features of thrombosis of cutaneous vessels with infiltration of vessel wall with inflammatory cells. Postoperatively, the healing process was delayed but after 6 weeks all the wounds healed. The patient, however, succumbed to his cirrhotic liver disease after three months while awaiting liver transplantation.

Discussion

Cirrhosis of liver is one of the serious complications of Wilson's disease. Wilson's disease as such is a rare autosomal recessive inherited disorder of copper metabolism. The condition is characterized by excessive deposition of copper in the liver, brain, and other tissues.¹ Cirrhosis of liver has been reported in literature leading to many dermatological disorders. This ranges from



Figure 1 Wide gangrenous area over anterior abdominal wall.



Figure 2 Gangrenous areas over both thighs.

hyperbilirubinemia² to widespread and lethal necrotizing fasciitis.³ There are reports of gas gangrene afflicting cirrhotic patients even after minor trauma.^{4,5} Even without any apparent trauma, patients can develop diffuse gangrenous patches^{6,7} as happened to our patient and the condition of the patient can deteriorate at a rapid pace. There are reports of development of gangrene of digits in cirrhosis particularly if associated with diabetes.⁸ The cirrhotic patient can develop vitamin and trace element deficiencies which in turn can cause dermatological complications.⁹ Calciphylaxis which leads to severe skin necrosis has also been reported in cirrhosis particularly when associated with renal dysfunction.¹⁰ To conclude, the skin complications of cirrhosis can start as small innocent looking lesions but these need to be detected early and treated aggressively to halt the progressive deterioration and thereby prevent preterm end of the patient.¹¹

References

1. Walshe JM. Copper: its role in the pathogenesis of liver disease. *Semin Liver Dis* 1984; **4**: 252-63.
2. Friedman S, Schiano T. Cirrhosis and its sequelae. In: Goldman L, Ausiello D, eds. *Cecil Textbook of Medicine*. 22nd edn. Philadelphia: Saunders; 2004. P. 936-4.
3. Lee C, Chi C, Lee H *et al*. Necrotizing fasciitis in patients with liver cirrhosis: predominance of monomicrobial Gram-negative bacillary infections *DMID* 2008; **62**: 219-25.
4. Kazumoto M, Atsuya S, Koujiro T, Takeshi N *et al*. Liver cirrhosis with synchronous gas gangrene and spontaneous bacterial peritonitis due to *E. coli*. *J Gastroenterol* 1997; **32**: 264-7.
5. Kuroda S, Okada Y, Mita M *et al*. Fulminant massive gas gangrene caused by *Clostridium perfringens*. *Intern Med* 2005; **44**: 499-502.
6. Takeyama M, Mori H, Nagareda T *et al*. A case of non-traumatic clostridial skin gangrene occurring in a patient with colon adenocarcinoma, liver cirrhosis and diabetes mellitus. *Pathology Inter* 1986; **36**: 757-64.
7. Tee WS, Chan HL, Suri R. Spontaneous skin necrosis in alcoholic liver cirrhosis. *Int J Dermatol* 1998; **37**: 78-9.
8. Lazarov G, Tsanev A. Multiple gangrene of the digits in a female patient with liver cirrhosis, diabetes mellitus and cryoglobulinemia. *Vutr Bules* 1985; **24**: 97-101.
9. Fuchs J. Alcoholism, malnutrition, vitamin deficiencies and skin. *Clin Dermatol* 1999; **17**: 457-61.
10. Chavel SM, Taraszka KS, Schaffer JV *et al*. Calciphylaxis associated with acute, reversible renal failure in the setting of alcoholic cirrhosis. *J Am Acad Dermatol* 2004; **50**: 125-8.
11. Afifi R, El-Hindawi A. Acute necrotizing fasciitis in Egyptian patients: A case-series. *Int J Surg* 2008; **6**: 7-14.

Sajad Ahmad Salati, Sari M Rabah

Department of Plastic & Reconstructive Surgery,
King Fahad Medical City, Riyadh, Saudi Arabia

Address for Correspondence

Dr. Sajad Ahmad Salati
Assistant consultant Surgical Specialties
King Fahad Medical City
Riyadh Saudi Arabia
Email: docsajad@yahoo.co.in

