**Abstract**
Terry's nails are a type of apparent leukonychia, characterized by ground glass opacification of nearly the entire nail, obliteration of the lunula, and a narrow band of normal, pink nail bed at the distal border. The aim of this study is to guide clinical practice by reviewing all of the data concerning Terry's nail that have become available since the original description by Terry in 1954, with particular reference to all clinical features, associated medical conditions, pathogenesis, and necessary workup. PubMed was searched using the keywords "leukonychia" and "Terry nails." Although the abnormality can occur with normal aging, Terry's nails can also be an indication of an underlying medical condition, most notably, cirrhosis, chronic renal failure, and congestive heart failure. A change in nail bed vascularity, secondary to overgrowth of connective tissue, is thought to be responsible, with nail bed biopsy revealing telangiectasias in the distal band. The differential diagnosis for Terry's nails includes half-and-half nails (Lindsay's nails), Muehrcke's nails, and true leukonychia totalis/partialis. Having the ability to delineate these nail findings can be a valuable tool in clinical practice as each entity is associated with a different set of systemic conditions. Terry's nails highlight the intimate connection between nail changes and systemic disease as well as the importance of thorough nail inspection with every physical examination.

**Key Words:** Chronic renal failure, cirrhosis, congestive heart failure, leukonychia, nails

**Introduction**
Nail changes can serve as an important clinical sign for underlying systemic disease. In 1954, Terry[1] reported a unique fingernail abnormality that he found to be common among patients with cirrhosis. The goal of this study is to enhance understanding of data that have become available since the original description by Terry in 1954, evaluating clinical features and associated medical disorders. PubMed was searched using the keywords “leukonychia” and “Terry nails”. In subsequent studies, this nail finding, known as “Terry’s nails,” also demonstrated a strong association with congestive heart failure and chronic renal failure.[2,3] In addition, Terry’s nails have been identified in patients with type 2 diabetes mellitus, chronic allograft nephropathy, acute viral hepatitis, vitiligo, and tuberculoid leprosy.[3-7] Terry’s nails can also appear in the elderly as a nonpathologic manifestation of normal aging.[2,8]

**Clinical Features**
As described by Terry,[1] this abnormality is evident as a bilaterally symmetrical whitening of the fingernails that involves nearly the entire nail bed, sparing only a narrow segment at the distal border [Figure 1]. This extensive pattern of opacification obliterates the outline of the lunula and creates a 0.5–3 mm pink or dark brown band at the tip of the fingernail, which represents normal nail bed tissue.[1,2] Although the hallmark distal band is typically well defined and contiguous with the end of the nail bed, it may possess an uneven border.[1] Longitudinal ridging of the nail plate and nail bed thickening can also be associated with the condition.[1]

**Differential Diagnosis**
The differential diagnosis for Terry's nails includes half-and-half nails (Lindsay’s nails), Muehrcke’s nails, true leukonychia totalis/partialis, halogen toxicity, and erythrodermic psoriasis.
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Table 1: Differential diagnosis for Terry’s nails

| Apparent leukonychias | True leukonychias |
|-----------------------|-------------------|
| Half-and-half nails (Lindsay’s nails) | Leukonychia totalis |
| Muehrcke’s nails | Leukonychia partialis |
|                       | Transversalis |
|                       | Striata |
|                       | Punctata |

Figure 1: Terry’s nails. A classic presentation of Terry’s nails demonstrating ground glass opacification of nearly the entire nail with A – No visible lunula and B – A narrow band of normal, pink nail bed at the distal border

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and true leukonychia totalis/partialis [Table 1]. Although both Terry’s nails and half-and-half nails can be seen in patients with chronic renal disease and are characterized by ground glass opacities, half-and-half nails are distinct in that only about half of the proximal nail bed is opacified.[4,9,10] Like Terry’s nails, Muehrcke’s nails are a disorder of the nail bed and can be a reflection of systemic disease.[11-13] However, Muehrcke’s nails have a distinct pattern of paired, white, transverse lines that typically spare the thumbnail and are usually seen in association with hypoalbuminemia and chemotherapy.[11-13] Moreover, the pathological changes in Muehrcke’s nails are reversible with a rise in serum albumin.[14] On initial inspection, true leukonychia may mimic Terry’s nails; however, true leukonychia involves the nail plate rather than the nail bed.[15,16] Therefore, unlike Terry’s nails, which retain the proximal nail discoloration as the nails grow outward, a true leukonychia will grow out with the nail.[15] Neapolitan nails, or white nails associated with old age, may also resemble half-and-half nails.[17-19]

Pathogenesis

Terry’s nails represent an “apparent leukonychia” as the whitened appearance of the nail is due to underlying defects in the nail bed. Although the pathophysiology of this condition remains undetermined, a change in nail bed vascularity, secondary to overgrowth of connective tissue, is thought to be responsible.[2,20-22] Nail bed biopsies, which revealed telangiectasias in the distal band, further support microvascular involvement.[2,17]

Conclusion

Terry’s nails are characterized by ground glass opacification of nearly the entire nail, obliteration of the lunula, and a narrow band of normal, pink nail bed at the distal border. Although the abnormality can occur with normal aging, Terry’s nails can also be an indication of an underlying medical condition, most notably, cirrhosis, chronic renal failure, and congestive heart failure. This finding highlights the association between nail changes and systemic disease as well as the importance of thorough nail inspection with every physical examination.

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Conflicts of interest

There are no conflicts of interest.

What is new?

Terry’s nails may also reflect chronic renal disease, congestive heart failure, and other disorders.

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