

# Celtic Tiger: A case of onychogryphosis

Rory Mc Dermott, Rachel Kidney

## CASE REPORT

This 79-year-old female was admitted via the Emergency Department having been found living alone in squalor. On examination she was unkempt, confused and obviously malnourished. Her lower limb examination revealed grossly hypertrophied and elongated toenails ("Ram's horn" deformity) [1] affecting the hallux bilaterally (figure 1A, B). There was superficial ulcerations and cellulitis of the dorsum of both feet (figure 1B, C). Pedal pulses were normal.

She was treated with intravenous fluids, and antibiotics (flucloxacillin 500 mg by mouth, four times daily for five days) and commenced on appropriate dietary supplementation. Regular aseptic dressings were applied to the ulcers. The nailbeds were conservatively managed using a surgical pincer.

## DISCUSSION

**Aetiology:** Onychogryphosis is predominantly an acquired nail dystrophy causing thickening, increase in length, and curvature of the affected nail plate; it occurs more commonly in the great toe [2] (figure 1D). Incidence is highest in the elderly.

**Causes:** The deformity arises as the nail matrix produces the nail plate at uneven rates [3]. Microscopically the cells show a disorderly wave-line distribution with hyperchromatism, parakeratosis and numerous splits. It can be caused by trauma (including repetitive micro trauma) or peripheral vascular disorders, but most often it is secondary to neglect and failure to cut the nails for extended periods of time [4].

**Diagnosis:** It remains largely a clinical diagnosis based on characteristic appearance. Often confused with fungal nail infections, it fails to respond to traditional anti-fungal therapies. The absence of fungal species on culture further supports the diagnosis.

**Management:** The management of onychogryphosis largely depends on the cause. In the first instance every effort should be made to avoid excessive pressure on the nail bed. Footwear should be reviewed to assess appropriateness. Mild cases can be treated conservatively with regular nail trimming. Nail plate avulsion may be required where the deformity is more severe.

## CONCLUSION

This case highlights the importance of good foot care in the elderly population. Confused patients represent a particular challenge in this respect. Improved access to community services (podiatry, public health nurses etc.) can help prevent many simple acquired nail disorders. Diagnosis of existing onychogryphosis is largely straightforward whilst treatment is associated with low morbidity and mortality.

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Rory Mc Dermott<sup>1</sup>, Rachel Kidney<sup>2</sup>  
**Affiliations:** <sup>1</sup>Senior House Officer, Division of Internal Medicine, St. James's Hospital, Dublin, Ireland; <sup>2</sup>Consultant Physician, Division of Internal Medicine, St. James's Hospital, Dublin, Ireland.  
**Corresponding Author:** Rory Mc Dermott, 13 Century House, 102 Westminster Bridge Road, London, SE1 7XT; Ph: 077 69824568; Email: mcdermor@tcd.ie

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Figure 1 A-D): Onychogryphosis of toenails with superficial ulceration and cellulitis of the dorsum of both feet.

### Author's Contributions

Rory Mc Dermott – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Rachel Kidney – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

### Guarantor

The corresponding author is the guarantor of submission.

### Conflict of Interest

Authors declare no conflict of interest.

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## REFERENCES

1. Rapini, Ronald P.; Bologna, Jean L.; Jorizzo, Joseph L. *Dermatology* 2007;(2):1135
2. Kouskoukis CE, Sher RK. Onychogryphosis. *J Dermatol Surg Oncol* 1982;8:138-40
3. Zaias N. *The Nail in Health and Disease* 2nd ed. Norwalk, Conn: Spplrton & Lange 1990:164
4. James, William; Berger, Timothy; Elston, Dirk. *Andrews' Diseases of the Skin: Clinical Dermatology* 2005;(10):789-90