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**CASE REPORT** 

# A case of ingrown toenail with maggots: A personal experience

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#### ABSTRACT

The invasion of the skin and sub-cutaneous tissues with larvae (Maggots) is not infrequently seen in humans. It is basically the flies which feed on living tissues and lay eggs which develop into maggots and start eating the dead tissue. We present a very unusual case of a 35-year-old, mentally retarded man who presented with infected ingrown toenail. The patient had inborn deformity and crowding of the toes. On examination a large number of maggots were found crawling over and coming out from deeper tissues. The wound was explored and treated by excising the tissue alongside the nails with nail removal at the same time. The nail plate excised on the sides and maggots cleared.

**Keywords:** Ingrown toenails, infection, complications, maggots, ambulatory surgery, dead tissue.

## Introduction

Ingrown nail is not infrequently seen in surgical practice among young population causing severe pain and limitation of routine activities. 1 Its commonly because of inappropriate clipping of nails, use of tight shoes, overcrowding of toes, unhygienic conditions, fungal infection, ignorance, obesity and genetic predisposition.<sup>2</sup> The ingrown toenail usually passes through stages of inflammation, pain, edema and abscess formation.<sup>3</sup> Pain and walking difficulty are one of the major reasons for patients to seek medical advice.4 The disease mainly involves the great toe but finger nails may also occasionally get involved.5 It is more commonly reported in females.<sup>6</sup> The incidence of infection in the ingrown toenails is reasonably high. Ambulatory surgical treatment is in vogue currently with cosmetically acceptable results.7 Despite and increased rate of infection, there is hardly any case with maggots reported so far in literature.

# Case report

A 35 years young, mentally retarded, unmarried man presented with infected ingrown toenail. On examination he was found to have overcrowded toes with a closed front covered shoe. The toe was dressed up and on opening there was massive infection with edema and cellulitis. The tissues on the sides of nail was darkened and few maggots were wriggling inside Figure 1. Preliminary workup was followed by excision of the toe nail. After excision of the nail a large number of maggots were found deep in the tissues lateral to the nail edges and there were pores through which they were coming out on pressing the great toe Figure 2. A wide excision was made with nail bed excised from the sides. The wound thoroughly washed with pyodine and surgical dressing done after securing hemostasis.



Figure 1: Ingrown toenail



Figure 2: Excision of the nail



### Discussion

Ingrown toenail is frequently associated with pain and can be secondarily infected requiring surgical treatment.8 A number of anatomic and habitual factors are reported to be the risk factors such as improper and inadequate trimming, repeated trauma, genetic makeup and poor foot hygiene.9 Great toe is the most common victim but occasionally fingers can be affected with prevalence at its peak in second and fifth decades.<sup>10</sup> We report a case of a young, mentally retarded man who presented with infected, unilateral ingrown toenail with maggots crawling in the infected wound. Despite being a common condition, maggots are not reported in the ingrown toenails. This is a unique case which indicates that ignorance can lead to a worsening of the condition and the treatment then demands an extensive tissue removal to ensure clearance. We treated the patient under local anesthesia and removed the nail and found maggots crawling underneath. Deeper dissection was done and the lateral nail plates excised. The wound is being dressed after toilet with pyodine.

### References

- Reyzelman AM, Trombello KA, Vayser DJ, Armstrong DG, Harkless LB. Are antibiotics necessary in the treatment of locally infected ingrown toenails?. Archives of family medicine. 2000; 9(9):930-32.
  - DOI: https://doi.org/10.1001/archfami.9.9.930
- 2. Dadaci M, Ince B, Altuntas Z, Kamburoglu HO, Bitik O. Skin bridging secondary to ingrown toenail. Pak J Med Sci 2014; 30(6):1425-1427.
  - DOI: https://doi.org/10.12669/pjms.306.5790
- 3. Haneke Controversies in the treatment of ingrown nails. Dermatology Research and Practice. 2012, DOI: https://doi.org/10.1155/2012/783924
- R. D. Gillette, Practical management of ingrown toenails. Postgrad Med. 1988: 84(8)145-58. DOI: https://doi.org/10.1080/00325481.1988.11700517
- Murtagh J. Patient education. Ingrowing toenails. Aust Fam Physician. 1993; 22(2):206.
- 6. Haneke E. Nail surgery. Clin Dermatol. 2013; 31(5):516-25. DOI: https://doi.org/10.1016/j.clindermatol.2013.06.012.
- Chen RC, Blume PA. Regional anesthetic techniques for foot surgery. In Essentials of Regional Anesthesia. Cham: Springer; 2018, 375-85.
- Bryant A, Knox A. Ingrown toenails: the role of the GP. Aust Fam Physician. 2015; 44(3):102-5.
- 9. Heidelbaugh JJ, Lee H. Management of the ingrown toenail. Am Fam Physician. 2009; 79(4):303-8.
- 10. Geizhals S, Lipner SR. Review of onychocryptosis: epidemiology, pathogenesis, risk factors, diagnosis and treatment. Dermatol Online J. 2019; 25(9):1-8.