

*Research Article***Prevalence of onychomycosis in adult females****Ghada A. Nasif., Maha H. Ragaa and Aliaa A. Amen**

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**Abstract**

Onychomycosis is a nail infection caused by fungi, which may behave as primary pathogens invading the healthy nail plaque or develop secondarily to a preexisting nail disease. The primary concerns of the patients are the risk of spread to other nails or to people in their environment. In addition to these social and emotional problems, onychomycosis is a serious medical problem that can be the source of further fungal infections to surrounding tissues.

**Keywords:** Onychomycosis , fungi, nail infection.

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**Introduction**

Onychomycosis is defined as a fungal infection of the nail that expands slowly and if left untreated leads to complete destruction of the nail plate (Kalokasidis et al., 2013).

Onychomycosis represents about 30% of all dermatophyte infections and accounts for 18%–40% of all nail disorders. The prevalence of onychomycosis ranges between 2% and 28% of the general population (Rathur and Housley, 2015).

Onychomycosis is considered an important public health problem, due to its high prevalence and therapeutic difficulty associated with high rates of recurrence and progression to chronic lesions (Zanardi, et al, 2008)

**Subjects and methods**

The present study was conducted on 40 patients suspected clinically to have onychomycosis from the attendants of the Dermatology Outpatient Clinic, Minia University Hospital. All patients will subjected to the Consent from the patient, detailed history, General and local clinical examination. Onychomycosis was confirmed with dermoscopy, nail clipping for

PAS stain and mycological culture. Data were analyzed using Statistical Package for the Social Sciences (SPSS), Version 22.. Quantitative data were presented by mean and standard deviation, while qualitative data were presented by frequency distribution.

**Results**

According to age of our studied group, the patients have a mean age of  $35 \pm 11.8$ . Females were the dominant by (80%) of the patients vs. males who constituted (20%). The mean duration of onychomycosis in was  $11.4 \pm 6.8$ . The major percentage 20 patients (50%) had severe form of onychomycosis (according to onychomycosis severity index) followed by 13 patients (32.5%) had moderate form and 7 patient (17.5%) had mild form.

**Discussion**

This also was in agree with the previous studies (Kalokasidis et al., 2013, Chiacchio et al., 2013 and Azambuja et al., 2014 ) which revealed that the frequency of onychomycosis was higher in women. This does not mean that onychomycosis occurs more frequently in women but that men may be more negligent in matters relating

to the cosmetic appearance and hygiene of their feet (Kalokasidis et al., 2013).

### Conclusion

Onychomycosis is very common in adult females particularly candidal onychomycosis. This might be due to that women self inoculate their nails from their vaginal candidal flora. Moreover, another possible cause for high frequency of onychomycosis in women is that they frequently use water, detergents and soap during household work, and their finger-nails are prone to trauma in case of housewives.

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### References

1. Kalokasidis K, Onder M, Trakatelli M-G, Richert B, Fritz K, (2013): The Effect of Q-Switched Nd:YAG 1064 nm/532nm Laser in the Treatment of Onychomycosis In Vivo, *Dermatology Research and Practice*, pp. 1-10.
2. Rathur H and Housley A. (2015): The Incidence of Asymptomatic Onychomycosis in Diabetes mellitus. *Clinical Research on Foot & Ankle*: 1-3.
3. Zanardi D, Nunes DH, Pacheco AS, Tubone MQ, Souza Filho JJ. (2008): Evaluation of the diagnostic methods of onychomycosis. *An Bras Dermatol.*; 83:119-124.
4. Chiacchio ND, Suarez MV, Madeira CL, et al., (2013): An observational and descriptive study of the epidemiology of and therapeutic approach to onychomycosis in dermatology offices in Brazil. *Anais brasileiros de dermatologia* 88, 3-11.
5. Azambuja CVdA, Pimmel LA, Klafke GB, et al., (2014): Onychomycosis: clinical, mycological and in vitro susceptibility testing of isolates of *Trichophyton rubrum*. *Anais brasileiros de dermatologia*, 89: 581-586.