INTRODUCTION

Tinea Capitis (TC) is a fungal scalp infection that poses a universal concern due to its common spread among children especially primary school children. Prevalence of TC is higher in the developing countries e.g. ivory coast (13.9%) and Nigeria (31.2%) than in the developed ones e.g. London (2.5%). This variation in the pattern is believed to be due to many reasons such as the lifestyle, geographical region and climate situation.

Many studies were conducted in the Middle East to determine the prevalence of tinea capitis; 209 samples out of 1568 (Prevalence 13%) were positive for scalp fungi in Tehran 2006. Since TC is highly contagious and can be transmitted by close contact, it is important to identify asymptomatic carriers in order to minimize its spread between siblings and school children and to avoid underestimation of TC prevalence.

In a retrospective study in Greece screening for scalp fungi carriers among the immigrant population who live with index cases, the prevalence was very high (97%) which adds to the significance of screening asymptomatic individuals as an important approach in preventing TC. Tinea capitis has a variety of clinical presentations based on the causative organism and the immunity status of the host. The most common clinical features are: patchy hair loss, scaly scalp skin, pruritus and erythema. TC may be characterized by other features such as kerion, patchy black dot and dandruff like pattern.

There were many risk factors which contribute to the development of TC in each geographical region. Screening children from both urban and rural areas have revealed higher prevalence of TC among the latter. This supports the evidence from many studies that low socioeconomic status predisposes children to TC. The effect of hygiene on the prevalence of TC is controversial. After reviewing the literature, some studies suggested that poor hygienic habits have no effect on developing TC. On the other hand, some studies have related low socioeconomic conditions with the poor hygiene making the two factors parallel to each other in terms of TC predisposition. Sharing beds, combs, personal equipment and animal contact have been highly associated with TC predisposition.1 Sharing beds, combs, personal equipment and animal contact have been highly associated with TC predisposition.

OBJECTIVES

To determine the prevalence of colonization with scalp fungi (dermatophytes) among asymptomatic children aged between 2-15 years in primary schools and children attending primary care clinic at KKUH in Riyadh.

MATERIALS AND METHODS

A quantitative, observational cross-sectional study was carried out from February to March 2016 in pediatric primary care clinic at KKUH and a number of primary schools in Riyadh, Saudi Arabia including children aged from 2-15 years from both genders with no signs and symptoms of Tinea capitis whose parents agreed to fill in the questionnaire and allow their children to be screened. A total of 932 children were included in the study. Concerning the pediatric primary care clinic, Parents accompanying their children for several reasons such as vaccination, follow-up, check up & vital signs were asked to take part in the study by filling the questionnaire and allowing their children to be screened. The prevalence of 932 children was reported in any of the cultured scalp fungi among asymptomatic children.

RESULTS

The total number of subjects enrolled in the study was 932 and due to incomplete surveys 60 were excluded. The prevalence of dermatophyte carriers among the total sample size (n=872) turned to be Zero percent since no growth was reported in any of the cultured samples.

Table 1 shows the distribution of Tinea capitis different risk factors. Risk factors were classified into associated problems with the disease, environment and behavior.

CONCLUSION

The prevalence of Zero percent that was found in the present study is not unpredictable and we believe that this may be reassuring about the carrier state of the fungi in this region of the kingdom, or this may be a misleading result due to some of the variables and factors which differ when compared to other studies.

REFERENCES


ACKNOWLEDGMENT AND CONTACT

• College of medicine, King Saud university
• Dr. Abdulmajeed Alajlan
• Dr. Ahmed Albarqaa
• Our data collectors
• CONTACT: Omaraldhasee@gmail.com
• “The authors extend their appreciation to the Deanship of Scientific Research at King Saud University for funding this work through the Undergraduate Research Support Program, Project no. [URSP – 77 – 32].”