# Primary Cutaneous Aspergilliosis – A Rare Condition of The Immunocompetent

[1]Sandeep S; [2]Prashant N; [3]Choong CL; [4]Munir H; [5]Sanjeevan R; [6]Azuhairy A;
Department of Orthopaedic Surgery, Penang General Hospital, Penang, Malaysia.

## INTRODUCTION:

Aspergillosis species is the most ubiquitous fungi seen in soil, water and decaying vegetation. It affects mostly the lungs, naso-orbital area and central nervous system, rarely the skin[1]. Clinically it may present as macules, papules or plaques. It may be primary, affecting the skin that is injured from trauma, intravenous cannulation or burns. Secondary cutaneous lesion may be from widespread hematogenous origin. However, it usually occurs in immunocompromised patients but only in rare occasions, it is seen in immunocompetent patients, such as in this particular case we will be discussing.

## REPORT:

A 9 year old girl presented with 3 weeks history of painless swelling over bilateral knee. She had no significant medical history prior to this. She also did not complain of any constitutional symptoms. There was a history of fall in the toilet 1-month prior in which she sustained abrasion wound over bilateral knees.

There were multiple papular nodules coated with whitish tinge over both knees. These swellings were palpable and the largest was about 1.0cm x 1.0cm in size. They were mobile and were extra-articular. Range of motion of both knees were full. The child's gait was also normal. There were no palpable inguinal lymph nodes noted. Inflammatory markers showed a normal CRP with a raised ESR of 20mm/hr.

The child underwent an excision biopsy of bilateral knee swelling. Intraoperative findings noted chalky white material noted in the subcutaneous layer which did not respect borders.

HPE was reported as tumoral calcinosis compatible with calcinosis cutis. Ziehl-Neelsen stain came back negative for tuberculosis. Fungal culture was reported as Apergilliosis species while all other cultures returned negative.

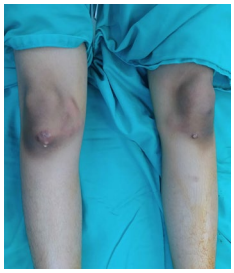

**Figure 1: Bilateral knee papular cutaneous swelling**

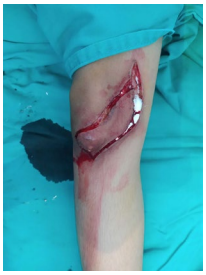

**Figure 2: Intraoperative picture showing chalky white material in the subcutaneous layer upon making incision**

The child was started on intravenous antifungals for two weeks followed by oral agents for a further 4 weeks. She is also being investigated for dystrophic calcinosis under the rheumatology team.

## CONCLUSION:

Primary cutaneous Aspergilliosis is rare but not unheard of. A high index of suspicion is needed and coupled with a detailed history taking to aid the correct diagnosis. This is even more important if the patient is immunocompetent. The treatment of cutaneous aspergilliosis is a meticulous surgical debridement and antifungal chemotherapy.

## REFERENCES:

1. Mohapatra et al., Indian Journal of Medical Microbiology; Volume 27 (4); Pg367.