



GENETICS AND GENODERMATOSES

DERMATOPHYTIC DISEASE WITH DEFICIT IN CARD9: A NEW CASE WITH A BRAIN IMPAIRMENT.

Boudghene Stambouli Omar⁽¹⁾

University Hospital Faculty Of Medecin, Department Of Dermatology Laboratoire Toximed 32, Tlemcen⁽¹⁾

INTRODUCTION: Dermatophytic disease individualized by Hadida and Schousboe in 1959 is a rare form of chronic dermatophyte infection; characterized by subcutaneous and visceral invasion and a therapeutic failure.

OBSERVATIONS: The patient was 47-year-old, she was born parents first cousins. She had since the age of 10 years scaly scalp lesions that became secondarily papular and nodular. At the age of 17 years, the patient had a generalized skin involvement with multiple nodular lesions, diffuse disease of the nails (plurionyxia), poly lymphadenopathies affecting the cervical, axillary and inguinal areas. Mycological tests identified *Trichophyton rubrum*. Histopathological examinations showed caseiform necrosis with epithelioid and giant cells. PAS staining showed hyphae in necrosis. The rest of the blood and urine tests were normal. Sequencing CARD9 allowed to highlight a homozygous mutation Q289X. The evolution was marked by an appearance at the age of 47 of a right cerebral abscess fronto-temporo-parietal, cortico-subcortical detected by MRI. The patient was given itraconazole 200mg/day with good evolution after three months of decline.

DISCUSSION: Fifty cases have been published, mostly from North Africa, a strong endogamy region. Signs and symptoms almost always start with a scalp ringworm with almost constant occurrence of complications: in our patient a cerebral localization with a good evolution with itraconazole. Immunologically it is characterized by an autosomal recessive deficiency CARD9. This observation is notable for the onset of the disease at an early age, the dermatophyte *T. rubrum* and the favourable outcome of the brain lesion with itraconazole.

CONCLUSION: Dermatophytic disease is rare, often severe. Our case is original because of the occurrence of a cerebral localization with good response to itraconazole and its mechanism of action deserves to be elucidated.

KEYWORDS: Cerebral abscess; Dermatophytic disease; *Trichophyton rubrum*

