

Familial split-hand/foot malformation, depression and suicidality – A case report**Dr Dushad Ram¹, Dr Sudharani P Naik^{2*}, Dr Arun Kumar³**¹Associate Professor, ^{2,3}Resident, Department of Neuropsychiatry, JSS University, Mysore, Karnataka, India***Corresponding author**

Dr Sudharani P Naik

Email: drsudhanaijss@gmail.com

Abstract: Familial split-hand/foot malformation (SHFM) is a rare limb deformity with a prevalence of 1:10,000-1:90,000 worldwide. The literature search did not reveal any report of psychiatric disorder in patient having such deformity. In this case report, we are presenting a familial SHFM, depression and suicidality. The possible genetic link between suicidality, depression and Familial split-hand/foot malformation was discussed.**Keywords:** Familial split-hand/foot malformation, Depression, Suicidal attempt.

INTRODUCTION

Split-hand/foot malformation (SHFM) is characterised by the absence of the third digit, clefting of the proximal portion of the hand or foot and syndactyly of the remaining digits on each side of the cleft. In scientific literature, there is hardly any report of psychiatric disorder in patient with SHMF. Due to deformity, they may suffer more with psychiatric morbidity than non-deformity population. In this case report, we are presenting a familial SHFM, depression and suicidality.

CASE REPORT

Index patient NG was 45 years old, unmarried, unemployed Hindu female from the rural back-ground. She was born out of consanguineous marriage; attained

menopause 6 months back and had no psychiatric illness in the past. In her family father, one sister, two brothers and one nephew have SHFM. One cousin had depression and committed suicide 5 years back by hanging. Ten months back she developed severe persisting burning sensation in the right parietal region that would increase on lying down on the right side or taking warm water bath. Later she developed persisting sadness, crying spells, fatigability, difficulty in concentrating, decreased sleep & appetite and death wishes. She also had restlessness, increased sweating and palpitation. She attempted suicide thrice by hanging, but failed as family members intervene in-between. She delayed her visit to a physician for ten months, due to the negative attitude of people and embarrassment related to deformity.

**Fig-1: Split-hand malformation**



Fig-2: Split-foot malformation

Physical examination revealed median clefts of both hands and feet. In the right hand middle finger was absent while.

At the side of cleft syndactyly of the ring with the little finger and thumb with index finger was present. In the left hand on one side of cleft only thumb was present while other side little finger and middle finger was present. Foot examination reveals the presence of little and great toe on each side of the cleft. Mental status examination revealed sadness, decreased speech output, intermittent restlessness, depressive cognition and active suicidal ideation. In Hamilton Depression Rating Scale the score was 29. A diagnosis of severe major depressive disorder was made. Since the patient and guardian refused admission, she was started on tablet Escitalopram 10 mg/day, Amitriptyline 10 mg /day, Clonazepam 0.75 mg and Olanzapine 5 mg/day. The guardian was explained about risk, safety concern of the patient and need for supervised medication. Over two week symptoms improved significantly, but mild depressive symptoms persisted, so tablet Escitalopram was increased to 15 mg/day. Her symptoms improved in another two week. Tablet Olanzapine and Clonazepam were tapered off and only Escitalopram was continued for six months. She was referred to the surgery department for management of ectrodactyly.

DISCUSSION

This first case report is unique due to the familial nature of SHFM, suicidality, depression and associated psychosocial consequences. Familial SHFM inheritance is predominantly autosomal dominant, though autosomal dominant or recessive, X-linked, incomplete penetrance, segregation distortion, and digenic inheritance is reported [1,2]. Patient with SHFM may be genetically predisposed to suicidal behaviour as attributed etiological chromosome Xq, 6q,

10q, 12q and 17p are common in both condition [3,4]. Both conditions also share 2q, 7q, 10q, 12q and 17p that has been associated with depression and thus appeared to be predisposed [3,4]. Depression and suicidal behaviour is perpetuated by psychosocial consequences such as unemployment, un-married status, stigma and Social believe that such a rare deformity is punishment from God or due to worshipping the evil spirit.

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