ORIGINAL RESEARCH PAPER
Volume - 10 | Issue - 03 | March - 2021 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

JUVENILE ONSET TOBACCO DEPENDENCE-A RARE CASE REPORT

Paediatrics

Dr. Suresh heijebu Government hospital for Mental Care, Visakhapatnam, King George's Medical University, Lucknow.

ABSTRACT

Increasing tobacco use by children in developing nations is a significant threat to their physical and mental health. **Cigarette smoking is often considered as gateway to a more serious drug abuse. In most studies the average age of first-time smokers ranged from 12-14 years**.[1] Several risk factors-neurobiological, family, peer influences, sociocultural and psychiatric comorbidity increase vulnerability to development of substance use disorders. Early tobacco use needs timely intervention to protect a vulnerable child from becoming addicted. **Here we present a case of early onset of tobacco smoking in a 9 year male child from Kolkata.** The child was brought by his mother with chief complaints of cigarette smoking, headache, easy irritability, decreased academic performance and stealing money since 2 years, which were increased in the last 6 months. The child showed a complete remission on Oral Risperidone 0.5 mg and supportive psychoeducation for 12 months.

KEYWORDS

child, tobacco, dependence, addiction, substance use, early onset

INTRODUCTION

Substance abuse in children has been a rising problem. According to latest UNDCP report, India has the largest population of children constituting **39%** of country's population, putting our nation in a higher threat. Adolescence constitutes important formative years of life during which the child acquires academic, cognitive, social and life skills. Substance abuse at this age is likely to interfere with the normal development of child and may have a long lasting impact. **Not only the child, but the family and society as a whole are likely to be affected as a whole. Thus, this issue is a matter of national interest and priority.**

Case presentation

A 9 year male child belonging to lower socioeconomic urban background of Kolkata was brought to OPD by his mother with chief complaints of cigarette smoking, easy irritability, aggressive outbursts, decreased academic performance, stealing money and headache since 2 years increased over 6 months. The child admits to smoking local brand cigarettes of various sizes made available to him by his classmates and others selling tobacco in the vicinity. The number of cigarettes smoked were gradually escalated from 5-20 per day over a time. In the last few months, the child also admits smoking weed (Ganja) occasionally via hand rolled cigarettes with stuffed dried weed powder. Initial behavioural disturbances include head banging, irritability, poor appetite, sudden aggressive outbursts, crying spells, biting tendency, picking up quarrels, disobedience and abusiveness. Parents of child attributed it to ill effects of black magic on their son by neighbours and took him to a local faith healer, but their efforts went into vain. The child's symptoms continued to worsen over time wi disturbances in self care, appetite and sleep(ranging from insomnia to hypersomnia). Gradual onset of cognitive disturbances(decreased attention span, forgetfulness, learning difficulties) and truancy lead to poor academic performance. Child spend most of day with friends in smoking and procuring cigarettes initially with money given by parents and later by stealing money from home and neighbourhood. Later child developed somatic symptoms like fatiguability, headache, breathlessness, body ache, chest discomfort, palpitations and intermittent swallowing difficulty. During the entire course of illness there were no signs or symptoms suggestive of a psychotic or mood disorder. No history of inappropriate or precocious sexual behaviour, intellectual disability or seizure disorder. The child is 2nd of 3 siblings born out of a non consanguineous marriage with a family history of alcohol and tobacco abuse in father. Birth and developmental history was uneventful. Past medical history revealed hospitalisation for an uncomplicated typhoid 5 years ago. **It is pertinent to note here that youngest sibling aged 6 years started tobacco use from 1 year under influence of his elder brother.** General physical and systemic examination was unremarkable. **Mental status examination** revealed a conscious, alert and cooperative child maintaining eye contact with reduced psychomotor activity, relevant and coherent speech with increased reaction time and reduced speech productivity. No abnormalities in form, stream or content of thought were noted. No active or passive suicidal ideation. No perceptual abnormalities. Mood was irritable, appropriate and communicable with a restricted range. HMFs showed attention disturbances with an intact orientation, memory and above normal intelligence. **During hospitalisation** the child was thoroughly evaluated via blood work up, CB-NAAT, sputum C/S, CXR, videolaryngoscopy, UGIE and MRI Brain. Investigations revealed anaemia, mild degree of bronchitis, grade 3 tonsillitis and a normal parenchymal brain study. Antibiotic and Iron therapy was indicated for correction of laboratory abnormalities and chest symptoms. The child was started on atypical antipsychotic Risperidone 0.5 MG owing to growing role of atypical antipsychotics in smoking cessation programs modulating the dopamine neurotransmitter levels. Significant clinical improvement was noted with Risperidone in terms of biological functions, reduced tobacco craving, decreased irritability and temper tantrums. Psychoeducation was given to reduce the drug seeking behaviour. The child maintained well on 0.5 mg Risperidone night dose and was apparently free of any drug related adverse events. The child was followed regularly in the OPD for 6 months after which the medication was gradually tapered and stopped. Thereafter he was followed for another 6 months to identify any early relapse, but the child continued to be in remission with an improved academic performance.

DISCUSSION

Tobacco use disorder (TUD) is most prevalent, deadly, and costly of all substance use disorders (SUDs).[2] Unfortunately TUD has been most ignored SUDs in mental health and addiction treatment settings, particularly by psychiatrists who continue to erroneously see TUD as a lesser priority in comparison to other SUDs according to a major survey conducted by American association of Medical colleges in 2007. Adolescence is viewed as a critical period in development of substance dependence due to it's inherent tendency to explore novelty in environment. Earlier, substance abuse was considered a problem of street, working and trafficked children. But today it has become a widespread problem among schoolchildren of different socioeconomic and educational statuses(Kailash 2016). Predisposing risk factors include low self esteem, poor interpersonal relationships, lower socioeconomic status, aggressive and impulse behaviour, drug abuse in parents, difficulty in delaying gratification and poor coping skills. According to NDDTC and AIIMS NCPCR 2013 study, craving(49.1%), peer pressure(40.6%) and local availability of substances(30.2%) constituted 3 major factors that prevented children from giving up the substance.[3] The Drug Abuse and Addiction(2017) report showed influence of family and home environment during childhood.[4]Parents or family members who indulge in substance abuse or criminal behavior can increase such risk in their children. Protective measures like nurturing home environment, supportive family, appropriate adult supervision, assertiveness, good school environment, adult role models, academic success, social competence and peer group with positive personal attributes should be encouraged at various levels. Risperidone in few studies was found to help in smoking cessation by it's interactions with dopamine receptors and

modulating the external cues of craving behaviour. This was clearly identified in our case report. **This case highlights an urgent need to identify and understand substance users to make and promote strategies to help our society fight against substance dependence among children.**

REFERENCES

1. J Sadock B. Comprehensive textbook of psychiatry. China; 2017.
2. Ahuja N, Niraj A. A short textbook of psychiatry. Jaypee Brothers Publishers; 2006 Jul 30.
3. Dhawan A, Pattanayak R, Chopra A, Phukan R. Assessment of pattern, profile and correlates of substance use among children in India. National Commission for Protection of Child Rights (NCPCR). New Delhi. 2013.
4. Rathore BS, Joshi U, Pareek A. Substance abuse among children: A rising problem in India. The International Journal of Indian Psychology. 2017;5(1):176-89.