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*Case Report*

# Case Report on Aggressive Childhood Behaviour

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## ABSTRACT

**Introduction:** Conduct disorder is a type of aggressive disorder in children prevalent in 10% of school children. Aggression is forceful or attacking behaviour, either constructively self-assertive or self-protective or destructively hostile to others or to oneself. Aggressive behaviour in young children may be developmentally normal and must be differentiated from abnormal when it is chronic in nature or occurs in greater frequency or intensity than expected.
**Case Presentation:** We present a case of10 year old school boy who inflicted a penetrating injury over the occiput of another school boy with scissors. This child under study was suffering from conduct disorder due to parental neglect and family dispute.
**Discussion:** Conduct disorder it a type of aggressive disorder in children prevalent in 10% of school children. Aggression is forceful or attacking behaviour, either constructively self-assertive or self-protective or destructively hostile to others or to oneself. Aggressive behaviour in young children may be developmentally normal and must be differentiated from abnormal when it is chronic in nature or occurs in greater frequency or intensity than expected. Behavioural disorders featuring aggression are among the most common problems facing by clinicians. Clinician should be able to understand the types of aggression, the biologic and neuropsychological correlates, and the associations with psychiatric diagnoses.
**Conclusion:** Aggressive conduct disorders in young children caused by behavioural and emotional disturbances are highly prevalent and best managed by social constructions of parents and caregivers and behavioural therapy, psychotherapy, cognitive therapy and meditation to the child.

***Keywords:*** Childhood behaviour, child psychosis, psychotherapy.

## INTRODUCTION

Aggressive conduct disorders in young children are caused by behavioural, emotional and psychological causes. The prevalence of Conduct disorder is estimated to be between 1.8% and 16.0% for boys and 0.8% to 9.2% for girls.[(1)] This high prevalence of behavioural disorder needs longitudinal, comprehensive care with an emphasis on prevention and promotion of healthy lifestyles within the school and home.

## CASE REPORT

A 10 year old male child was admitted with alleged history of penetrating injury with scissor over occiput region after an incidence of fight in school. On admission patient was conscious, oriented and vitally stable. On examination there was 2 cm x1 cm incised wound on occipital region near midline, with scissor blade embedded in it (Fig. 1). On computerised tomography metallic foreign body was seen in occipital region piercing the outer and inner table of skull and brain (Fig. 2). There wasno evidence of hematoma around.

Post - operative period was uneventful and patient was discharged after 10 days

Fig. No.1. Embedded scissor blade over occiput region in Midline.

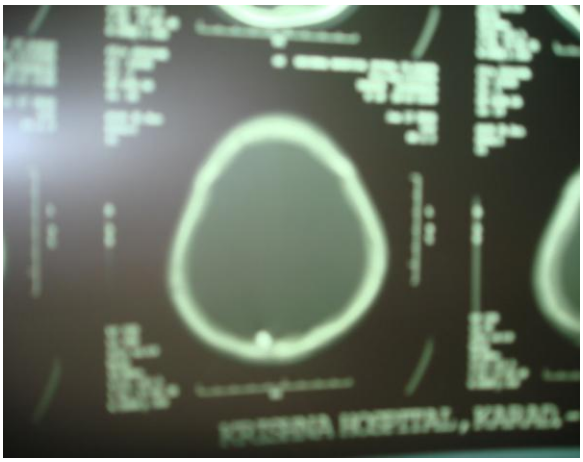


Fig.No.2: Computerised tomography image showing metallic foreign body in occipital region piercing the outer and inner table of skull and brain

Fig. No.3: Penetrating foreign body in Occipital region

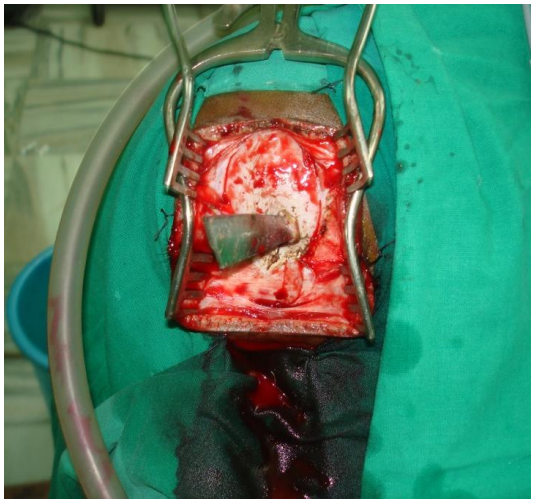

Fig. No.4: Intraoperative image of embedded scissor blade in cranium

## DISCUSSION

Paediatricians play an important role in the mental health of their patients as part of leading the medical home. [(2)] Up to 20% of all children and adolescents having mental health disorders receive proper care. [(3)] Providing longitudinal, comprehensive care with an emphasis on prevention and promotion of healthy lifestyles within the medical home can have economic advantages.

Behavioural disorders featuring aggression are among the most common problems faced by clinicians. Clinician should be able to understand the types of

aggression, the biologic and neuropsychological correlates, and the associations with psychiatric diagnoses.

Aggression is forceful or attacking behaviour, either constructively self-assertive or self-protective or destructively hostile to others or to oneself. Prospective studies of young children show that the peak frequency of aggression in humans occurs between 2 and 4 years. [(4)] In many cases, aggressive behaviour in young children would be considered developmentally normal (example temper tantrums) and must be differentiated from abnormal when it is chronic in nature or occurs in greater frequency or greater intensity than expected. About 10% of elementary school children have chronic physical aggression, but by adolescence the incidence falls to 5%.

**-Types of aggression**

The different aspects of aggression are important to understand. Types of aggression include impulsive, proactive, and maladaptive. [(5)]

*Impulsivee aggression* is best understood as an angry, defensive response to a threat or provocation seen as "hot"—emotional and impulsive and not goal oriented.

*Proactive aggression* is seen as premeditated and calculated, with an end goal in mind.

*Maladaptive aggression* is defined as behaviour, because of its intensity, frequency, and duration that is not adaptive to the individual and is out of proportion to its precipitants and social contexts. [(6)]

**-Pathophysiology**

The pathophysiology of aggression involves the amygdala and limbic system and its connections.

A hypothetical balance of systems exists that regulates emotional reactions to stimuli. [(7,8)] The *bottom-up* system embeds emotional significance in stimuli which appears to dominate emotional processing in childhood and adolescence."Hot cognitions," such as those seen in stressful and arousing situations, tend to increase amygdala activity.

The *top-down* system involves the prefrontal cortex, which integrates emotional and cognitive information and regulates emotional reactivity. It matures later and represents "cold cognitions".

The amygdala is closely tied to aggression through its input from cortical regions and projections to the hypothalamus and brainstem areas involved in attention, arousal, and autonomic function. [(9)] Reactive aggression is associated with an overactive amygdala and limbic system. [(10)] Disturbed amygdala function also is found inproactive aggression, most often seen in conduct disorder (CD) and criminal behaviour. In general, reduced amygdala activity is associated with more aggressive symptoms and callous-unemotional traits. [(11,12)]

It's been suggested that poor parenting and early environmental stresses may lead subsequent down regulation of the HPA axis and increased aggression. [(8)]

**-Mental health diagnoses associated with aggression**

It is important for the clinician to consider mental health diagnoses associated with aggression, because treating the underlying mental health diagnosis should lead to significant reduction in the severity or frequency of aggression. [(13,14)]

The 3-month prevalence of anypsychiatric diagnosis in a population study of 4,500 children aged 9- 13 years was 20.3% (similar to the 30-day prevalence of 23.4% for any disorder in adolescents aged 13 to 17 years listed in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed). [(15,16)] The community prevalence of Conduct disorder is estimated to be between 1.8% and 16.0% for boys and 0.8% to 9.2% for girls, and that of Oppositional defiant disorder is 1.5% to 15.6%. [(17)] Overall it

appears that aggression functions as a nonspecific marker for severity of psychiatric illness. [18]

**-Evaluating aggression**

Clinicians may use the acronym FIND: frequency, intensity, number of events, and duration of events - to evaluate and quantify the severity of the aggression. [19]

Interviewing the child alone to hear his or her description of the event and to build rapport [19-21] and evaluate for suicidality, substance abuse, and child abuse is crucial.

Various rating scales can be used as aids for diagnosis and screening or tools to track aggression. [22,23] The 14-item violence injury protection risk screen is a tool designed to detect youth aged 14 to 17 years at immediate risk for future violence. [22]

Other scales, such as the Achenbach Child Behaviour Checklist, have aggression subscales for parents to assess conduct problems and oppositional behaviour. The Overt Aggression Scale measures observable aggressive or violent behavior, including verbal and physical aggression against the self, other people, or objects. [23]

Other scales covering aggression include the Connors rating scales, 10- or 28-item scales developed for the assessment of Attention Deficit Hyperactivity Disorder.

**-Biopsychosocial formulation and risk factors.**

The clinical interview and biosocial formulation leads to diagnosis, and effective treatment plan. Risk factors include biologic influences such as genetics, medical illnesses, and medications, prenatal drug exposure, nutritional deficiencies, birth complications, temperament, deficits in social cognitive processing, poverty, harsh parenting, low social cohesion, and direct exposure to violence. [20]

Protective factors include supportive, positive parenting; school success; and social acceptance. In a group of boys with early onset aggression, those with multiple risk factors were most likely to show aggression in adolescence. [24]

A history of traumatic brain injuries, learning disorders, drug or alcohol use within the last 24 hours, seizure disorders, lead exposure, delirium, and medications including steroids, inhalers, selective serotonin reuptake inhibitors, and benzodiazepines must be considered. [22-25]

## CONCLUSION

Aggressive conduct disorders in young children caused by behavioural and emotional difficulties are highly prevalent and best managed by social constructions of parents and caregivers and behavioural and psychotherapy, cognitive therapy and meditation to the child. School health examiners should look aggressively for evidence of behavioural disturbances in children during school visits.

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