KLÜVER-BUCY SYNDROME AFTER A HEAD TRAUMA IN CONDITIONS OF CHILD ABUSE AND NEGLECT

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INTRODUCTION

Klüver-Bucy syndrome (KBS) is a behavioral phenotype, described in monkeys and humans, typically developing after a damage of temporal lobes. The damage is often bilateral but can be unilateral. KBS has been also described after head trauma including minor one. Cases in children are relatively rare, the reported etiology often being herpes encephalitis. The main symptoms of KBS are hyperorality (examining objects by putting them into the mouth), hypermetamorphosis (excessive attentiveness to visual stimuli with a tendency to touch every such stimulus), placidity (docility, tameness), bulimia, increased sexual activity, loss of normal fear and anger responses, visual agnosia, and amnesia (Asensio 2003, Clay et al. 2019, Das & Siddiqui 2020, Juliá-Palacios et al. 2018, Lippe et al. 2013). Here is presented a case with a lifelong symptom constellation compatible with KBS, developed after a head injury under conditions of child abuse and neglect.

CASE REPORT

A 2-years-old boy (S.), playing in a yard of a suburb house, was hit by a stone in his left temporal area. The stone was thrown by an older child. An immediate medical help was not sought; the boy stayed in bed for several days. Transitory neurological symptoms were observed (strabismus, blepharoptosis, occasional aspiration of food), having disappeared within 3-4 years, although slight left ptosis has permanently remained. Within a few years, S. developed basic KBS manifestations exemplified below. Placidity with a loss of normal fear and anger responses: till into his thirties, S. had difficulties with saying "no", being e.g. involved in alcohol-consuming companies, hooliganism, petty larceny, drunk driving, irresponsible political talks, criticism of influential persons, etc., resulting in detentions by the police (militia), assault and battery, as well as other trouble (Jargin 2011). Visual agnosia: insufficient orientation has been felt to be present since the childhood; later it was noticed e.g. by the car driving, when he lost orientation in difficult traffic conditions especially in the darkness. Since the age of ~ 45 years, S. has abstained from the driving. The patient often needed time to recognize familiar persons such as neighbors. Indiscriminate hypersexuality: obsessive search

for sexual partners since the puberty, promiscuity at the age 20-45 years; staring at women in public places, foot fetishism. There were also predisposing factors such as permissiveness by adults in the patient's childhood: S. spent 3 summers (age 3-5 years) in a suburb with his nanny. There were almost no contacts with other children; the boy was sitting on a sofa for days on end, playing among others with the nanny's toes and placing them inside his mouth. The nanny also encouraged by laughing the exhibitionist behavior and masturbation by rubbing against the bed surface. She also gave wine to the child. In a later life, hyperorality was expressed e.g. by licking female feet and cunnilingus. In the literature, hypersexuality is recognized as a possible consequence of brain injury also in children (Chatterjee et al. 2017). Furthermore, a memory disorder can be exemplified by confabulations, while S. often forgot what and whom he had narrated. Nutritional behavior abnormalities: S. was often unable to cease eating and drinking alcohol. Both compulsive behaviors have persisted lifelong being attenuated with age, as health consequences of overeating and alcohol overconsumption have become more obvious. Finally, dullness or "emotional behavior changes" (Clay et al. 2019) were pronounced, while the patient acknowledged his own shamelessness and immorality. After a course of rational psychotherapy, the patient gained more insight, which was followed by the emotion of shame (Jargin 2019).

DISCUSSION

The differential diagnosis of KBS has been delineated elsewhere (Das & Siddiqui 2020). In the present case, the clinical picture was complicated by domestic violence administered by slapping in the face and head till the age of 13-14 years, and thereafter - by episodic heavy binge drinking discontinued at ~35 years when it had become incompatible with the patient's professional duties. The differential diagnosis included frontal lobe syndrome (FLS). Symptoms of KBS and FLS are partly overlapping: cognitive derangements with impaired perception of risks, sexual disinhibition with insufficient concerns about consequences and morals; details and references are in (Jargin 2017a). KBS due to frontal or frontotemporal lesions have been reported (Ozdemir & Rezaki, Pericot-Nierga et al. 2009). Partial KBS was regarded as one of the possible manifestations of frontal dementia (Zachhuber et al. 1999). Of note, exact demarcation between KBS and FLS is inconsequential for lack of specific therapy. KBS is managed on a symptom-by-symptom basis including assistance in daily living and occupational therapy i.e. drug therapy may be unnecessary if the patient retains satisfactory control over his/her behavior (Clay et al. 2019). In our case, there were problems e.g. at workplaces due to the staring at women and inappropriate advances; but currently S. is retired, working remotely, so that the matter has lost topicality. Among differentialdiagnostic considerations at a younger age were attention deficit hyperactivity disorder (ADHD) and autism spectrum disorder (ASD) having partly overlapping manifestations. In our case, ADHD symptoms were observed in the early childhood: inattention, impulsivity and hyperactivity. Furthermore, investigators noticed that behaviors of autistic children are partly similar to those in KBS e.g. cognitive derangements and deficits in adaptation (Hetzler & Griffin 1981). Presumably, some children with autistic traits might be maltreated ADHD children or initially healthy ones (Jargin 2017b). In conditions of domestic violence, impulsivity, hyperactivity and other outstanding behaviors may be regularly punished. Atypical behaviors compatible with ASD (abnormal communication, lack of eye contact, evasion of closer relationships) might be consciously or subconsciously implemented to avoid stress, conflicts and punishments. Finally, considering traumatic experiences in the patient's childhood, neurotic, especially obsessive component has probably plaid a role in the phenotype formation. Head CT performed at the age of \sim 35 and 50 as well as EEG at ~55 years revealed no abnormalities. Having no proven morphological substrate, the contribution of different factors is difficult to assess. Regarding the case history and presence of basic symptoms of KBS, the latter diagnosis seems to be corroborated in the present case.

CONCLUSION

The clinical picture compatible with KBS can be observed lifelong after a head trauma under conditions of child abuse and neglect. KBS is a behavioral phenotype that typically develops after a damage of temporal lobes. KBS symptoms due to frontal or frontotemporal lesions have been reported as well. The main features are hyperorality (tendency to explore objects in the mouth), bulimia, increased sexual activity, placidity, hypermetamorphosis, visual agnosia, and amnesia. KBS has been described as a result of head trauma, also after minor one. Cognitive and behavioral disturbances may be considerable but improvements can occur over time.

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