

## Conversion Disorder presenting as Camptocormia: A case report

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### Abstract

**Background:** Camptocormia is characterized by an abnormal posture of the trunk with marked flexion of the thoraco-lumbar spine, which increases during walking and abates in the recumbent position. The disorder is rarely seen in day to day practice. The cases are usually present in elderly age group; young age group of presentation is rare.

**Case Report:** We report a case of a young girl which was referred from the orthopedics department and subsequently improved with supportive psychotherapy and anxiolytic medication.

**Discussion:** A multidisciplinary approach with intensive psychiatric follow-up is needed and our case aptly shows this. In Indian scenario only a few cases have been described. In both the cases psychological stresses were found. Supportive psychotherapy has been reported as the main effective treatment in almost all case reports.

**Key words:** Camptocormia; Conversion Disorder; Supportive Psychotherapy.

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### Introduction

Camptocormia derived from two Greek words “kamptos” meaning bend and “kormos” meaning trunk, also referred to as “bent spine syndrome,” is characterized by an abnormal posture of the trunk with marked flexion of the thoraco-lumbar spine, which increases during walking and abates in the recumbent position<sup>(1)</sup>. Camptocormia was first described by the English physiologist and surgeon Brodie in 1818, who suggested that lumbar pain and abnormal curvatures of the spine could be caused by both destructive processes of the vertebrae and by hysterical reactions<sup>(1)</sup>. The French neurologists, Souques and Rosanoff-Saloff, who proposed the term “camptocormia” or in French “incurvation du tronc”, drew attention to this disorder in their report of 16 cases in 1915<sup>(2)</sup>. The disorder has psychogenic etiology; however organic causes like dystonia, Parkinsonism and caudate nucleus pathology is also reported as causes<sup>(3)</sup>. The disorder is rarely seen in day to day practice. The cases are usually present in elderly age group; young age group of presentation is rare<sup>(3)</sup>. A couple of case reports have shown the disorder to be present in younger subjects in the form of a conversion disorder manifestation<sup>(4)</sup>. We report a case of a young girl which was referred from the orthopedics department and subsequently improved with supportive psychotherapy and anxiolytic medication.

### Case Report

Ms. A an 18 year old adolescent girl was referred from the orthopedics department to the psychiatry out patient. Her examination revealed a girl with bent posture, her body was flexed at about 60 degrees and she was walking slowly, her hands slowly dangling by her side, she strained to look up and appeared sad. She reported to having pain in her back and legs. The examination of the history revealed that she was suffering from this postural abnormality since about six months, the abnormality started gradually and took

about a fifteen day period to fully develop into its present state. Ms. A reported to having pain in the back at the start of the illness. She was admitted and kept under observation in the orthopedics ward and had undergone extensive investigation including an MRI of the spine, all the investigations were within the normal range. It was noted that on sitting and sleeping her spine was found to be straight. After being admitted in the orthopedics ward for three weeks, she was discharged and referred to the psychiatry outpatient section. A detailed evaluation of history from us revealed that she was selected in the engineering examination. She got admission in a good college. After joining her college, she started adjusting to the routine of classes and practical, during this time she found that her grandmother had become ill and was admitted in the hospital with a serious illness. At the same time her father was facing a financial crisis, due to the grandmother’s illness and her fees which was a substantial amount and due to be submitted in a couple of days. Ms. A was undergoing considerable stress and reported to being unable to concentrate in her studies. She also reported to feeling guilty for being the cause of her father’s worries. Around the same time she heard her father crying one day, following that day she started complaining of the pain in back which gradually worsened. She was taken for multiple consultations and so she was allowed to drop her examination and was given a time relaxation for fee submission.

She was started on mild antidepressant (Escitalopram 5 mg) and etizolam 0.05 mg in two divided doses, simultaneously she was taken up for supportive psychotherapy which included relaxation exercises, ventilation, problem solving, coping enhancement and passive back exercises like assisted cycling in supine position. Fifteen days later she started showing improvement and was able to maintain an upright position for half an hour. Following the improvement she was discharged on medication and

thrice a week therapy. After two weeks the etizolam was tapered and withdrawn and the therapy was tapered to twice a week. At the end of one month the antidepressant was withdrawn but the therapy sessions were continued at once a week frequency. The patient continued to improve and long term planning for managing the finances for her study were discussed and short term and long term stress handling was appropriately advised. After three months of treatment the subject reached her pre morbid level of functioning and an upright posture. The therapy was terminated with appropriate instructions to continue the relaxation exercises and to practice stress handling procedures. A follow up six months later revealed a fully functional individual who was able to manage her stress well.

### Discussion

Camptocormia describes a severe forward-flexion at the waist<sup>(3)</sup> and the posture is normal during lying down and sitting. This was the classic presentation of our case too (Fig. 1, 2, 3). This term was initially used in reference to a conversion disorder seen in soldiers and was noticed during the Balkan wars and World War I and II<sup>(1)</sup>. The term has come to refer to any cause of forward-flexed posture during standing and ambulation that resolves with a lying position<sup>(3)</sup>. Case reports have discussed the etiology of camptocormia in association with basal ganglia pathology including Parkinson disease, bilateral lenticular lesions and in association with segmental dystonia<sup>(5)</sup>. Camptocormia has also been described in relation to a myopathic processes and ALS<sup>(5)</sup>.

In the present subject, many features in the history and examination pointed towards a psychogenic cause i.e. a sudden onset, proximity to psychological stressors, history of familial stresses, lack of any organic associations. Psychiatric evaluations helped in clarifying the factors influencing her clinical presentation. A multidisciplinary approach with intensive psychiatric follow-up is needed and our case aptly shows this. In Indian scenario only a few cases have been described<sup>(4,6)</sup>, in both the cases psychological stresses were found. Supportive psychotherapy has been reported as the main effective treatment in almost all case reports<sup>(3,4,6)</sup> and this modality was the mainstay of our management strategy also. We also used some passive exercises and straightening exercises to force systematic enhancement of functioning and normalization of routine in the patients functioning<sup>(7)</sup>. Clinical hypnosis is an option which has been used in some cases<sup>(3)</sup> although we did not use it in our case. This case highlights that an awareness of this rare condition helps in its early diagnosis and optimal treatment.



**Fig. 1: Camptocormia in standing position**



**Fig. 2: Spine straight during lying down**



**Fig. 3: Spine straight on sitting**

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