

Dissociative disorder presenting as foreign accent syndrome

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Abstract

The foreign accent syndrome (FAS) is a rare speech disorder, characterised by the appearance of a new accent, different from the speaker's native language and perceived as foreign by others. In the majority of patients, FAS is secondary to focal brain damage caused by stroke or other neurological disorders. Infrequently, FAS has been reported in association with psychiatric disorders, including dissociative or conversion disorders. The case of a young woman with recurrent episodes of speaking with a foreign accent is described. Repeated neurological examinations, imaging and electroencephalography did not reveal any brain abnormality. However, there was a history of a difficult childhood, alcohol dependence in the father, parental discord, alleged sexual abuse in the past, interpersonal difficulties and parental death. Episodes were precipitated by stressful life circumstances and resolved spontaneously, or with supportive treatment. She had additional "suspect" symptoms such as non-epileptic seizures, aphonia and motor paralysis. All these features indicated that a dissociative disorder was involved in the genesis of her FAS. The influence of external factors such as the media was unclear. Generally biological factors have been implicated in the onset of FAS, but the presentation in this young woman sug-

gests that psychological factors such as personality, trauma, stressful life events and psychiatric disorder; familial factors such as parental discord and parental death and family conflicts; and, social factors such the possible influence of the media may also be involved in the production of foreign accents by patients.

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Key words: Foreign accent syndrome; Dissociative disorder; Conversion disorder; Psychosocial

Core tip: The foreign accent syndrome (FAS) is a rare speech disorder, characterised by the appearance of a new accent, different from the speaker's native language and perceived as foreign by others. In the majority of patients, FAS is secondary to focal brain damage, but infrequently, it has been reported in association with psychiatric disorders, including dissociative or conversion disorders. The case of a young woman with FAS is described here, which shows that in rare instances dissociative disorder may be implicated in the genesis of the FAS. The aetiology of FAS is complex, and both biological and psychosocial factors could play a role in its onset.

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INTRODUCTION

The foreign accent syndrome (FAS) is a rare speech disorder characterised by the appearance of a new accent, different from the speaker's native language, and perceived as foreign by the speaker and the listener^[1-4]. To date, only about 85 patients with FAS have been reported in the literature, beginning with Pick's Czech

patient first identified in 1919^[4]. Previous exposure to the new accent is not necessary for the foreign accent to emerge^[2]. The syndrome is marked by considerable variability in its presentation, aetiology, and speech characteristics. Clinical manifestations are heterogeneous among patients with FAS, but usually include segmental deficits such as changes in vowel length and tenseness, and prosodic abnormalities such as inappropriate word and sentence stress. It has been suggested that FAS does not reflect any particular language or foreign accent; rather, it is characterised by a generic foreign accent. Though in many instances FAS involves some degree of aphasia or dysarthria, it is usually possible to distinguish the syndrome from the more typical presentations of dysarthrias, aphasias or Apraxia of speech following cerebral damage. Speech abnormalities in FAS can also be differentiated from the dysarthria, mutism, aphonia or stuttering, due to dissociative or conversion disorder. The foreign accent is often persistent, but can also be transient^[1-4].

In an overwhelming majority of patients, the syndrome is secondary to acquired focal brain damage. It usually follows stroke, but has been reported in patients with head injury, cerebral haemorrhage, multiple sclerosis and migraine. In most such instances, the lesions described have been found in the dominant hemisphere, and in most cases have involved regions typically associated with Broca's aphasia. Subcortical structures also seem to be consistently affected^[1-4]. The foreign accent syndrome has also been reported as a disorder of speech development^[5]. The underlying mechanisms of production of the syndrome are still unclear. It has been proposed that a variety of different lesions or factors may be involved in production of the foreign accents by patients^[1-4,6-8].

In relatively rare instances, no neurological basis has been found for patients presenting with the FAS, despite repeated clinical examinations and/or imaging studies. Some of these patients have been reported as having a psychogenic cause for their foreign accents^[3,6]. In others, the syndrome has been linked with psychiatric disorders such as psychotic or mood disorders^[2,7,8]. There are also a few case reports where FAS has been associated with dissociative or conversion disorders^[9-12].

CASE REPORT

A 20-year-old, unmarried woman was referred to the department of psychiatry of a multi-speciality hospital in north-India from the neurology outpatient clinic in August 2012. She was accompanied by her 18-year-old brother. Both were orphans and were staying with their maternal relatives some distance away from the hospital. Both the patient and her brother reported that she had had several episodes of speech disturbance since August 2011. During these episodes she would speak almost exclusively in English, which was not her native tongue and in a foreign sounding accent. All these episodes had

started suddenly following stressful circumstances. The earlier episodes had resolved spontaneously without treatment in a few weeks to months.

The patient had experienced a very difficult childhood. Her father had a problem of drinking excessively, and becoming violent and argumentative when intoxicated. There were frequent arguments between her parents regarding this issue. Her father died in 2006 of alcoholic liver disease. Following his death, their mother took over the responsibility of running the family farm and looking after the patient and two of her younger siblings. However, there were frequent altercations between her mother and some of her father's relatives who wanted to usurp their land.

In July 2011, the patient changed her school and enrolled in a residential school somewhat far from her home. This was done at her own insistence, because she did not like her old school and the students there. However, she had great difficulty adjusting at her new school. The rules seemed too strict to her and she felt that the students in the new school looked down upon her. So, she was very happy when in about a month's time she was allowed to go home for holidays. The patient remembered being very excited on the bus home and talking endlessly. After reaching home she slept for a while. When she woke up she suddenly started speaking almost exclusively in English with an accent, which was perceived as "foreign" by her family members. She hardly ever spoke in her native languages (Hindi and Punjabi). When forced to do so by relatives she appeared uncomfortable and spoke as if she were a "foreigner". This seemed strange to her family because they hardly ever spoke English at home. After about a week the patient developed several brief (10-15 min) episodes of unresponsiveness, during which she was conscious and aware of her surroundings, but could not talk or move. There were no features suggestive of an epileptic seizure such as loss of consciousness, tonic-clonic movements, incontinence or injury. She was admitted in a local hospital for treatment. The episodes were diagnosed as non-epileptic, and according to the patient she received aversive electric shocks to terminate the episodes. She was discharged after about a week's stay at the hospital. At home for the next two weeks, the patient had great difficulty walking and could not speak at all. She would either crawl, or walk with assistance. Although she tried to speak, it appeared as if "she had lost her voice". She communicated mostly by gestures, and had to be helped by her mother in carrying out all activities of daily living. After two weeks she suddenly regained her ability to walk and talk properly. Following this, she again started to speak mostly in English with a foreign accent. This lasted for about two months, after which the patient gradually switched back to using her native tongue. She was not sent back to the residential school, and stayed back home with her mother and younger brother and sister. She did well till about March 2012, when her mother died rather tragically in a road traffic accident.

The patient who was intensely attached to her mother was grief stricken and missed her mother terribly. However, she appeared to be getting over the bereavement till about four months later, when she again started speaking in English with a foreign accent again. She was brought to the neurology outpatient clinic, where repeated neurological examinations, an electroencephalography (EEG) and a computed tomography scan did not reveal any evidence of cerebral pathology. Hence, she was referred to the psychiatry department to evaluate her for psychogenic causes for her foreign accent.

Apart from her father's alcohol dependence, there was no history of any mental illness in the family. Birth and early development history was unremarkable. She was an average student at school and had no disciplinary problems there. Her younger brother and sister were healthy. Following their mother's death all three siblings were staying with their maternal relatives, and were being well looked after.

On examination she came across as a pleasant mannered and cooperative young woman. She was rather fashionably dressed. Throughout the interview she spoke predominantly in English, with a nasal intonation and an accent vaguely resembling an American one. Her speech also appeared to closely mimic that of anchors and presenters of English language programmes on the television. When forced to speak in her native tongue, she appeared uncomfortable, as if she unfamiliar with these languages. She spoke as an English speaking foreigner would, and seemed to be imitating actors in movies or persons on the television, who spoke with similar accents. Recordings of her speech were not available, but the impression derived from hearing her speak, was that the disturbances were mostly at a phonological level. Segmental and prosodic changes seemed to be involved, leading to changes in patients' accent, and making it sound foreign to her family members. There appeared to be no changes at the semantic and syntactic level from her previous usage of English.

Remarkably, she manifested no distress at her strange way of speaking. She said that she was quite comfortable with her manner of speaking, but her family members found it strange and objectionable. There were no other abnormalities on the mental state examination. Her brother was aware that she had a foreign accent syndrome. He had searched the internet and was concerned that she might have some brain damage. A diagnosis of mixed dissociative disorder according to ICD-10^[13] was provisionally made (the equivalent DSM IV TR^[14] diagnosis would be dissociative disorder NOS). Repeated neurological examinations, review of her imaging and EEG findings, and consultation with the neurologists did not suggest a cerebral cause for her symptoms. Although a detailed semi-structured assessment of her problems was carried out, the patient did not cooperate for formal psychological testing. Nevertheless, both the patient and her brother were constantly reassured on the basis of these results that the problem was most likely to be of psychological origin, and there was no evidence of

brain damage. The patient was encouraged to discuss her problems and emotional distress in one-to-one sessions with the treating doctor. About four or five such sessions were conducted over the next two months. During these sessions, apart from other interpersonal difficulties, the patient revealed multiple instances of alleged sexual abuse starting from a very young age by different family members and friends. Her speech gradually improved and she lost all traces of her foreign accent during this period. Shortly after this she discontinued therapy on her own accord saying that she feared she might become too dependent on the therapist.

DISCUSSION

The presentation of the FAS in this patient was similar to descriptions of the syndrome, both in instances of it being secondary to dissociative or conversion disorder, as well as those following brain damage^[1,2,6-12]. Not only did the patient speak in a language different from her native tongue, but she also used an accent, which was perceived as foreign by her family members. Additionally, when forced to speak in her native tongue she appeared uncomfortable, and spoke in the manner of a foreigner unfamiliar with the language. She had three similar episodes of FAS, all of which resolved within a few weeks to a couple of months. Spontaneous resolution of FAS has also been reported in patients with brain damage and those with psychiatric disorders^[2,8-10]. Recurrent episodes have been linked with exacerbations of psychosis in some reports^[8].

In this patient repeated neurological examinations, imaging and EEG did not reveal any brain abnormality. On the other hand, there was a history of a difficult childhood, alcohol dependence in the father, parental discord, alleged sexual abuse in the past, family conflict, interpersonal difficulties and parental death. All episodes were precipitated by stressful life circumstances. While in the first two episodes the foreign accent resolved spontaneously, the third episode resolved rapidly with reassurance and supportive sessions. She had additional "suspect" symptoms such as non-epileptic seizures, aphonia and motor paralysis. All these features enabled the diagnosis of a mixed dissociative disorder (ICD 10)^[13] to be made with some confidence. The equivalent diagnosis in DSM IV TR^[14] would be dissociative disorder NOS.

In DSM-IV^[14], dissociation is defined as "a disruption in the usually integrated functions of consciousness, memory, identity, or perception of environment". As a complex psychopathological process, dissociation occurs on a continuum ranging from minor normative reactions to clinically diagnosable psychiatric conditions. A history of neglect and abuse, or other traumatic events during childhood can be risk factors in the pathogenesis of adult dissociative psychopathology.

In many respects, the presentation of the FAS in this patient was concordant with what has been reported earlier in patients with dissociative/conversion disorder

and FAS. For example, the association with aphonia and the presence of interpersonal conflicts or stressful circumstances, the good prognosis for recovery and spontaneous remission, have all been noted in earlier such instances^[9-12].

Other aspects of her presentation were also remarkable. Her younger brother was very much aware of the existence of a foreign accent syndrome and believed it was caused by brain damage. Whether his beliefs influenced the patient's presentation of a foreign accent was not clear. Secondly, the influence of the media on the presentation of FAS in this patient was a distinct possibility. Her accent closely resembled that of television anchors and presenters, as well as movie actors, who frequently speak with similar foreign accents. Indeed, in 2007, there was a much publicised case of a young boy from a remote town in India who suddenly started speaking in fluent English with an American accent^[15]. He also claimed to be the reincarnation of a dead American scientist. Though the boy was never formally examined, but certain parts of his presentation suggested the occurrence of FAS. His problems were also believed to be influenced by difficult circumstances, and the electronic media. However, our patient appeared not to have heard of this incident.

FAS usually follows brain damage; hence, biological factors have been implicated in most patients with foreign accents. Purely psychogenic origin of FAS, as in this instance, is a rare occurrence. Moreover, the presentation of FAS in this young woman suggests that psychosocial factors such as personality, interpersonal difficulties, early upbringing, trauma, stressful life events and psychiatric disorder; familial factors such as parental discord and parental death, and family conflicts; and, social factors such as the possible influence of the media and the internet may also be involved in the in the production of foreign accents by patients. Thus, it highlights the fact that in certain patients, psychosocial factors may give rise to a foreign accent, which is virtually indistinguishable from its occurrence following brain damage.

COMMENTS

Case characteristics

The case of a young woman with foreign accent syndrome (FAS) is described here, which shows that in rare instances dissociative disorder may be implicated in the genesis of the FAS.

Clinical diagnosis

The aetiology of FAS is complex, and both biological and psychosocial factors could play a role in its onset.

Experiences and lessons

The presentation of FAS in this young woman suggests that psychosocial factors may also be involved in the in the production of foreign accents by patients.

Peer review

The authors describe a case of young woman with recurrent episodes of speaking with a foreign accent syndrome related dissociative phenomena precipitated by stressful life circumstances and resolved spontaneously, or with supportive treatment. This is very interesting case and well presented.

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