Underwear fetishism induced by bilaterally decreased cerebral blood flow in the temporo-occipital lobe

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DESCRIPTION

Fetishism is a disease characterised by sexual arousal caused by inanimate objects, often including clothing such as pants, bras, and stockings and women's shoes. Patients with fetishism often show a strong interest in non-genital body parts.

Hypotheses based on biology, conditioning, social learning and psychoanalysis have been proposed to explain the underlying mechanism of fetishism. However, it is difficult to elucidate the aetiology of this rare disease on the basis of large-scale evaluations. We previously reported that hippocampal

Figure 1 We performed single-photon emission CT (SPECT) imaging using 99 mTc-ECD as the tracer. We used proportional scaling to normalise the SPECT images and performed statistical analysis on a voxel-by-voxel basis using statistical parametric mapping (SPM8). The images were realigned, spatially normalised to a standard stereotactic space, which was based on the Montreal Neurological Institute template, and smoothed with an isotropic, 12 mm, full-width half-maximum Gaussian filter to improve the signal-to-noise ratio. Using Student t tests, we compared our SPECT data with those from 20 age-matched healthy controls that were drawn from a large database obtained from the National Center Hospital for Mental, Nervous, and Muscular Disorders.

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agenesis was associated with hypersexuality, considering that it was successfully treated with carbamazepine.¹ A relationship between temporal lobe dysfunction and fetishism has been described previously.² Few reports have described the association between fetishism and brain function. We examined this association using single-photon emission CT (SPECT) in a 24-year-old male patient who was arrested for stealing underwear and referred to our hospital for evaluation. The patient had stolen women's underwear on multiple occasions since the

age of 11 years, although he showed no interest in underwear that belonged to his mother, sister and girlfriends. He was an academically strong student. SPECT examination revealed bilaterally decreased cerebral blood flow in the temporal and occipital lobes (figure 1). Other neurological conditions were ruled out, and he was diagnosed with fetishism on the basis of history and examination and successfully treated with behavioural therapy. Klüver-Bucy syndrome is characterised by temporal lobe dysfunction and altered sexual behaviour.³ We believe that decreased function of the temporal lobe may have been associated with fetishism in our patient.

Learning points

- ▶ Fetishism can originate in childhood.
- ▶ Brain function tests should be performed when fetishism such as that observed in the patient reported here is identified.
- ▶ There may be an association between decreased temporal lobe function and fetish behaviour. Long-term monitoring for recurrent fetish behaviour and brain function is required in such patients after treatment.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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