

# NORMALIZATION OF SEXUAL BEHAVIOUR IN A FEMALE WITH DEMENTIA AFTER TREATMENT WITH CYPROTERONE

MIGUEL NADAL\* AND SWANTE ALLGULANDER†

\*Senior Consultant Endocrinologist, †Head of the Department of Geriatrics, Department of Geriatrics, Skellefteå Hospital, 931 86 Skellefteå, Sweden

## SUMMARY

Compulsive behaviours can be a feature of different psychiatric diseases but overt hypersexuality is nevertheless a rare condition in females, especially in the absence of endocrinological alterations. We present here the case of a 49-year-old female who, after several confusional episodes, required hospitalization first at the Psychiatry Clinic and later on at the Psychogeriatric Unit when the diagnosis of dementia of Pick's type was suspected, and who developed an overt hypersexuality manifested in the form of open and frequent masturbations. Due to the failure of conventional therapy, the antiandrogen agent cyproterone acetate was used resulting in a normalization of her sexual behaviour. No main side-effects could be observed and the drug was withdrawn after a few months of treatment. In our opinion, the antiandrogen cyproterone should be considered in similar cases when other therapies fail.

**KEY WORDS**—Dementia, hypersexuality, androgens, cyproterone, sexual aberrations.

Hypersexuality is a rare condition in females, and although different theories have been postulated its aetiology remains uncertain in most cases (Levine, 1982). Experimental and clinical observations have shown that there is a correlation between androgen levels and the biological libido (Waxenberg *et al.*, 1959; Frawley, 1973) by stimulation of the hypothalamic centres that regulate sexual behaviour (Geller *et al.*, 1969). Sexuality is, nevertheless, a highly complex function and many other factors may play an important role in its development and manifestations. A psychogenic aetiology has been postulated in some cases of sexual deviations (Allen, 1969) and the importance of psychodynamic factors has also been considered (Castelnuovo-Tedesco, 1967).

We present here a case that is interesting because of its rarity, that of a middle-aged female who, in the course of her disease, developed a pathological hypersexuality resistant to conventional therapy but who responded very satisfactorily to treatment with cyproterone acetate.

## CASE REPORT

The patient was female, aged 49, married and without children of her own. Previously healthy, in May 1987 she suffered a confusional episode of short duration. A similar confusional state occurred 1 year later, in April 1988. Subsequently, during the following months, she had sleeping problems and increasing agitation. Despite ambulatory treatment with neuroleptic drugs and antidepressives there was no improvement in the patient's condition and hospitalization was required by the end of the year.

On admission she was described as having poor facial expressiveness as well as being restless, with monotonous movements and continual wandering. She was well orientated as to time and space, but refused to reply to questions, responding only with short affirmations or negations, giving an overall psychotic impression.

The electroencephalographic examination showed a light episodic abnormality with a certain left side dominance. At this time a high-resolution computerized tomographic study showed both the brain parenchyma and the ventricles to be normal. A scintigraphic interpretation showed brain activity to be symmetrical, with a slight left

Address for correspondence: Dr Miguel Nadal, Department of Geriatrics, Skellefteå Hospital, 931 86 Skellefteå, Sweden. Tel: 46 910 71200. Fax: 46 910 71207.

side irregularity. A neuropsychological examination was also carried out and the results were consistent with left side frontotemporal brain damage. Since clinical symptomatology and behaviour were consistent with frontotemporal abnormality, the diagnosis of dementia of Pick's type seemed likely.

Periods of hospitalization alternated with periods at home and the patient's clinical condition was judged as stabilized. Somewhat later on, however, in January 1990, the patient's social behaviour deteriorated, disturbing the other patients. A manifest sexual hyperactivity began to make itself known in the form of unrestrained masturbation of increasing intensity. Not even the fact of the presence of other people restrained her from masturbating at all times. Treatment with antidepressives and neuroleptics was tried but no improvement could be achieved. A hormonal examination was undertaken approximately 3 months later but no alteration could be found, either clinically or analytically. Despite this, and largely due to the severity of her sexual behaviour, a therapeutic trial was carried out, after obtaining the patient's agreement and with her husband's consent, with the antiandrogen agent cyproterone acetate (Androcur (R)) initially with a dosage of 50 mg a day. As her tolerance of the agent was good, and since certain improvements could be noted, the dosage was increased to 100 mg per day after 3 weeks. One month later all sexual hyperactivity had ceased and the patient could spend weekends at home. The drug was successively reduced and it was completely withdrawn 3 months later. In total, the patient was treated with cyproterone acetate for almost 5 months. With the exception of a moderate increase in weight, no other side-effects could be observed during the therapy with cyproterone acetate. Since then her sexual behaviour has been completely normal.

## DISCUSSION

Compulsive behaviour can be a feature of various psychiatric illnesses not necessarily related to hormonal alterations. In the case here described no such changes could be observed, and conventional psychiatric pharmacotherapy failed to induce a change in the patient's sexual behaviour patterns.

The antiandrogen agent cyproterone acetate has previously been used in the treatment of sexual

aberrations among males (Cooper, 1986), but its use with females is very limited (Rothschild, 1970; Saba *et al.*, 1975; Mellor *et al.*, 1988). Furthermore, its use with patients with dementia is extremely exceptional since, to our knowledge, only one case (a senile male patient) has been reported (Rothschild, 1970). One interesting property of cyproterone acetate is that it suppresses the influence of androgens on their target organs (Brinkman *et al.*, 1983) even when their levels are not elevated. Due to the failure of conventional therapy and the degree of sexual disturbance in our patient, including the antisocial dimension of her abnormal behaviour, we decided to try this product. It proved to be very satisfactory and effective in this case and with a minimum of side-effects.

We conclude that in similar cases, especially in those where habitual therapy fails to provide results, the use of cyproterone acetate should be taken into consideration as an alternative therapy for females in the same way it is for males.

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