Clinical details of five cases of pituitary adenoma

Patient	Date of birth	Oral contraceptive use	Presentation	Diagnosis	HPL	Treatment
1	8 December 1934	Nil	Infertility 1968	Acromegaly 1969	Not known	Surgery
2	8 August 1923	July 1968-Jan 1976	Visual field defect 1976	Chromophobe adenoma 1976	No	Continued observation
3	29 March 1937	Nil	Amenorrhoea 1970. Amenorrhoea and galactorrhoea 1971	Pituitary adenoma 1975	Yes	Surgery
4	27 October 1937	Nil	Secondary amenorrhoea 1965	Cystic chromophobe adenoma 1972	Not known	Surgery
5	9 December 1939	1967-June 1969	Amenorrhoea and galactorrhoea 1971 and 1973	Pituitary adenoma 1973	Not known	Radiotherapy
6	18 September 1936	1965-75	Amenorrhoea and galactorrhoea 1976	Pituitary adenoma 1977	Yes	Bromocriptine

HPL = Hyperprolactinaemia.

Studies and results

The table gives clinical details of the five cases of pituitary adenoma (patients 1-5) reported during the course of the RCGP study and the one (patient 6) reported during the Oxford/FPA study. Patient 2 was taking an oral contraceptive when the pituitary adenoma was diagnosed and patient 5 was a former user. Patients 1, 3, and 4 had never taken an oral contraceptive. The respective periods of observation in the study for current users, former users, and never-users of oral contraceptives were 67 990, 42 622, and 111 252 woman-years. Patients 1 and 4 had had subfertility problems before recruitment to the study and so were not "at risk" of being recruited as oral contraceptive users. They should therefore be excluded from the comparison with the user group. On the other hand, about a quarter of the whole study control group used no form of contraception at the time of recruitment. Many of these subjects may also have had fertility problems and should be similarly excluded from the respective period of observation. With the small number of cases reported here, however, such detailed analysis would not be informative. Patient 6 was recruited in the Oxford/FPA study in the oral contraceptive group (period of observation 69 468 woman-years) but had stopped taking a contraceptive pill before her pituitary adenoma was diagnosed. The periods of observation in the other two groups in the study, consisting of women who used a diaphragm or an IUD, were 31 735 and 22 799 woman-years respectively.

Comment

While no reasonable assessment of incidence can be made from the few observations reported here, the data suggest that there is no substantial increase in the occurrence of pituitary adenomas associated with oral contraceptives. In neither study is there reason to believe that any diagnosed cases have been missed, and perhaps uncontrolled selective hospital-based studies give an exaggerated impression of the frequency of an association. The clinical details in this report show that the temporal relationship between the diagnosis of pituitary adenoma and oral contraceptive use is complex. The findings in the only case-control study reported to date[5] are in line with our results in that no association between prior use of oral contraceptives and pituitary tumour was detected. Coulam *et al*[5] suggest that the increasing incidence of pituitary tumours that they noted in women of childbearing age is more likely to be due to recent advances in screening methods and surgical procedures than to the use of oral contraceptives. Our own observations point to a similar conclusion, but studies with more extensive data are desirable.

1 Sherman BM, Harris CE, Schlechte J, *et al.* Pathogenesis of prolactin-secreting pituitary adenomas. *Lancet* 1978;ii:1019-21.

2 Hardy J, Beauregard H, Robert F. Prolactin-secreting pituitary adenomas: transsphenoidal microsurgical treatment. In:Robyn C, Harter M, eds. *Progress in prolactin physiology and pathology.* Netherlands: Elsevier-North Holland, 1978:361-9.

3 Royal College of General Practitioners. *Oral contraceptives and health.* London: Pitman Medical, 1974.

4 Vessey M, Doll R, Peto R, Johnson B, Wiggins P. A long-term follow-up study of women using different methods of contraception—an interim report. *J Biosoc Sci* 1976;**3**:373-427.

5 Coulam CB, Annegers JF, Abboud CF, Laws ER, Kurland LT. Pituitary adenoma and oral contraceptives: a case-control study. *Fertil Steril* 1979;**31**:25-8.

(*Accepted 15 January 1980*)

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