secondary to distortion of the optic chiasma, hypothalamus, or infundibulum with blockage of the blood supply in the stalk and differentiated this from postpartum and other causes of pituitary necrosis. Retention of some aspects of pituitary function by our patient makes this mechanism unlikely unless ACTH and gonadotrophin production is much more susceptible to ischaemia than production of other pituitary hormones. There is no evidence to suggest that our patient experienced the severely shocked state described by Sheehan or a Schwartzman reaction.⁵ Pituitary dysfunction in "normal pressure" hydrocephalus seems to result from damage to the hypothalamus rather than to the pituitary gland or its stalk, presumably as a direct effect of the intermittent bursts of intracranial hypertension.

In conclusion, this patient not only sheds light on the mechanism of development of pituitary failure but also draws attention to the possibility that pituitary insufficiency may be present in patients with so-called "normal pressure" hydrocephalus. Although studies are in hand to assess the frequency of this association, the clinical importance of pituitary failure in patients with similar hydrocephalus prompted us to report this case.

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The postcoital test: What is normal?

The test that many infertile couples find distasteful is the postcoital test, and, although it has been used for over 100 years, there is no agreement on what is a normal and satisfactory result. The test was first used in 1866 by J Marion Sims,¹ and in 1913 Huhner² published a series of articles describing it as his "cervix test." In 1959 Grant³ reviewed several descriptions of test results and commented that, with values varying from a few to 100 sperms per high power field, there was no consensus of opinion as to what constituted a satisfactory result. As all these reports were based on subfertile patients, he pointed out the need for normal volunteers as controls, but stated that he had been unable to persuade fertile couples to participate in the test. We have performed the test on 50 fertile couples and report our findings to establish a range of normal values.

Patients, methods, and results

The study group consisted of 50 patients, all of whom had proved their fertility with their husbands, had had no difficulty in conceiving their children, and had regular menstrual cycles. They had all recently been laparoscopically sterilised; thus their cervical mucus showed physiological cyclical changes. All the tests were performed during the ovulatory phase of the cycle. Patients were instructed that intercourse should take place late the night before the test, that they should remain supine for a minimum of half an hour after intercourse, and that they should refrain from douching or bathing.

The cervix was visualised with a Cusco's speculum and a tapered glass pipette was introduced into the cervical canal. A sample of endocervical mucus was aspirated, added to a drop of normal saline on a microscope slide, and immediately examined. The quantity of mucus, its quality, the number of sperms per high power field, the percentage of motile sperms, and the coitus test interval were recorded. If no spermatozoa could be seen on the initial preparation the specimen was fixed and stained with haematoxylin and eosin for easier identification of any sperms present.

The results of the 50 tests are summarised in the table. Only four specimens showed no sperms on unstained preparation and only one showed total absence of spermatozoa after staining. Forty specimens showed at least one sperm per high power field and were suitable for evaluation of percentage motility. Thirty-two of these showed sperms with motility of 50% or more. Only six specimens showed all sperms present to be non-motile. In 43 of the specimens the mucus was clear, in five cloudy, and in two blood-stained. The two blood-stained specimens showed "zero" and "occasional sperms only." The cloudy specimens showed sperm counts ranging from 0-78 with varying motility.

Results of postcoital tests

No of spermatozoa per high power field	No of patients	Percentage of spermatozoa motile	No of patients
0	1	0	6
Some spermatozoa seen after H and E staining only	3	1-24	0
Less than 1	6	25-49	2
1-5	6	50-74	4
6-10	5	75-100	28
11-20	8		
21-50	10		
51-100	8		
Greater than 100	3		

Discussion

Although it is commonly accepted that a normal result of the postcoital test should have 10 motile sperms per high power field,⁴ this has never been substantiated. This trial was designed so that a normal range for the test could be established. In our series of 50 tests on normal couples almost half had a result that would be considered unsatisfactory. Therefore we conclude that any postcoital analysis which shows any motile spermatozoa should be considered as indicating a normal result and there is no importance in the number of sperms per high power field. We would also recommend that where no sperms are seen on direct examination any specimen should be fixed and stained with haematoxylin and eosin. If sperms are detected the test confirms the couple's technique and anatomical normality. Twenty per cent of the specimens in our series had sperms with motility of under half including six samples where all the sperms were non-motile. As all these patients had had no difficulty in conceiving, the importance of finding necrostermia is debatable. Finally, the quality and quantity of mucus did not correlate with sperm counts or motility.

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Inhibition of intrinsic factor secretion by cimetidine

Cimetidine was released for general prescription by the Committee on Safety of Medicines in Britain in November 1976 for the treatment of patients with peptic ulceration. The exact role of this new drug in treating this type of condition has yet to be determined. Although a very thorough search has been made for toxic side effects,¹ most studies have been conducted over a relatively short period when compared with the likely duration of treatment.

The effect of the histamine H₂ antagonists on intrinsic factor (IF) secretion and hence their possible effect on vitamin B₁₂ absorption