A study of the sources of delay in the diagnosis and treatment of undescended testicle

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SUMMARY. Undescended testicle is the term applied to a group of congenital conditions which by their nature should be detected at birth. A study of the identification and treatment of cases of undescended testicle in one health district was undertaken through examination of hospital records. Altogether, only one in five cases of undescended testicle had been detected at birth. The main agents responsible for the detection and referral of cases were the school medical services and general practitioners. An average of 42 per cent of these boys had been seen as inpatients or outpatients by either surgeons or paediatricians before the diagnosis of undescended testicle was made. This implies that neonatal examination is inadequate or that unnecessary operations are being performed, or that there is a different aetiology to the condition.

Introduction

THE mechanism of testicular descent is not satisfactorily elucidated, but possibly occurs as a combination of intra-abdominal pressure and a relative lack of growth of the gubernaculum compared with the rest of the body.

Undescended testicle is the term applied to all variations from the low scrotal position. The testicle may be arrested along the line of normal descent, deviated from the normal line or retractile. Operation in the early years of childhood is generally accepted for undescended testicle. There is evidence that a testicle residing in the groin does not mature. It has been shown that a significant deterioration of the seminiferous tubules occurs after six years of age[1] and degeneration could begin at two years of age.[2] Sterility results if bilateral maldescent is allowed to persist until puberty, but orchidopexy has been shown to have a worthwhile effect on fertility even in the later years of childhood.[3,4] There is no reason to suppose that fertility is impaired in genuinely retractile testes.

The risk of malignancy in an untreated undescended testicle is 40 times greater than in a normal testicle.[5] The length of time the testicle remains in the abdominal position is important. The risk of malignancy is reduced if orchidopexy is performed before the boy is 10 years of age and is miniscule if orchidopexy is performed before the age of six years. For these reasons, orchidopexy should be carried out before five years of age or before two years of age if bilateral maldescent exists, to ensure optimal future fertility. We aimed to discover whether delays in carrying out orchidopexy had occurred in one health district and, if so, to identify the causes of delay.

Method

The case notes and neonatal records of all boys who had undergone surgery for undescended testicle over three separate one-year periods (1974, 1978 and 1982) were examined in a retrospective study. From these data, made available by computer from the Hospital Activities Analysis, a record was compiled of the patient's age at operation, the side of the operation, the 'agent' responsible for detection and referral, whether the condition was detected at birth and whether there had been any previous surgical or paediatric attendances as an inpatient or outpatient.

Results and Discussion

The results of the survey are shown in Table 1. There was a substantial rise in the number of orchidopexies performed between 1974 and 1978, but the reason for this is obscure. There was no change in the recording of data, but there may have been a change in surgical policy with a change in consultant staff.

Few cases were actually detected at birth, ranging from 17 to 25 per cent of those boys for whom notes were available. The majority of patients were referred for surgery by general practitioners or the school medical service. Thirty boys had been seen in hospital before the undescended testicle had been diagnosed, although often this was for trivial conditions, implying that

Table 1. Results for each of the three years surveyed.

	1974	1978	1982
Total number of orchidopexy operations	8	33	30
Average age at operation	9.0 years	9.3 years	7.7 years
Details of operations			
Left testis only	3	9	12
Right testis only	3	12	13
Bilateral	2	12	5
Detection			
Number of cases detected at birth	1	3	3
Number of cases missed at birth	3	14	17
No neonatal records (patient not born locally)	4	16	10
Agent of detection or referral			
General practitioner	6	15	14
School medical	1	15	13
Paediatrician or surgeon	1	3	3
Average age at detection by agents			
General practitioner	10.0 years	10.0 years	8.0 years
School medical	7.7 years	8.8 years	8.3 years
Paediatrician or surgeon	3.3 years	8.0 years	4.0 years
Number seen in hospital before detection of undescended testicle	3	10	17

examinations are inadequate or incomplete, not only in the neonatal period but also later.

The average age at operation fell from 9.0 years old in 1974 to 7.7 years old in 1982. However, there was some evidence (from only seven cases) that the average age at operation was lower when the condition had been detected at birth and left for follow-up by the general practitioner (four boys: ages 5.5 years, 6.0 years, 4.0 years and 5.0 years respectively), and lower still when follow-up was by paediatricians or surgeons (three boys: ages 3.3 years, 3.3 years and 2.5 years respectively).

Are some orchidopexy operations being performed unnecessarily? The presence or absence of the testis is usually checked after induction of anaesthesia and this check has prevented a few unnecessary operations. This test, therefore, should avoid the problem of operating on retractile testes. In at least three cases, however, the testis had specifically been recorded as present in the scrotum at a detailed earlier examination (apart from neonatal examination). Perhaps previously normally descended testicles become permanently 'retracted'.

Conclusion

We feel that this study has demonstrated the usefulness of neonatal screening in detecting undescended testicle and ensuring early treatment, the worrying aspect being the relatively low proportion of cases actually detected at birth. This strengthens the arguments for good paediatric surveillance by experienced personnel to ensure the earliest possible detection of this and other defects.

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Communication between doctors and dying patients

Semistructured interviews were carried out with four general practitioners and some of their terminally ill patients in order to investigate how doctors solve the problem of communication with these patients about the outcome of the illness. Three of the doctors preferred not to give explicit information, or to talk about the outcome, even when they knew that the patient realized that he or she was dying. Within this constraint they developed different ways of coping with the problem of how to talk to the patient. We interpret this behaviour as an attempt to remain within the framework of rules and expectations provided by the traditional roles of doctor and patient, a framework that would be threatened by the doctor's acknowledgement of helplessness. The fourth doctor did tell his patients, and treated the problem as one of counselling patients to help them cope with their predicament. His role of healer was thus extended to include terminally ill patients.

Source: Todd CJ, Still AW. Communication between general practitioners and patients dying at home. *Soc Sci Med* 1984; **18:** 667-672.