PLATE VII

A CASE OF UNUSUAL GENITAL MALFORMATION (PAGE 75)

Fig. 1.

Fig. 2.

A CASE OF UNUSUAL GENITAL MALFORMATION (PAGE 75)

Fig. 3.

Fig. 4.

PLATE IX

A CASE OF UNUSUAL GENITAL MALFORMATION (PAGE 75)

Fig 5

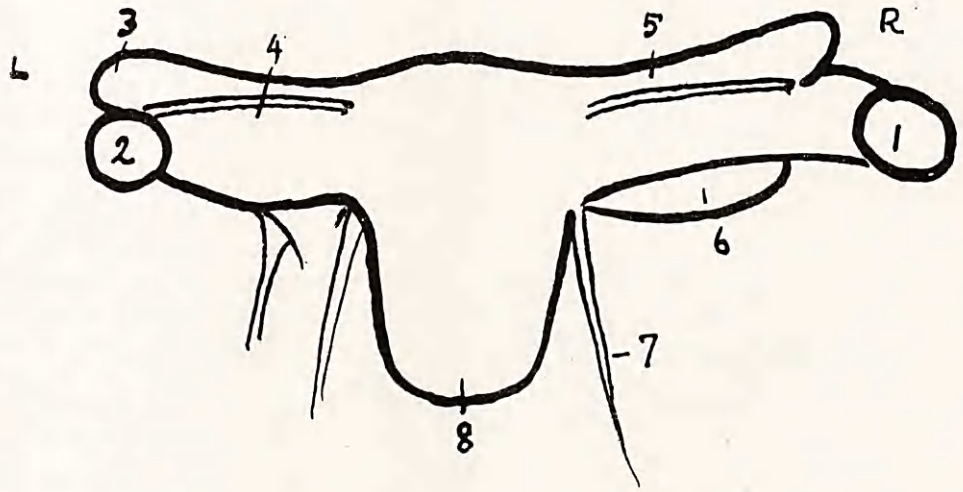


Fig 6

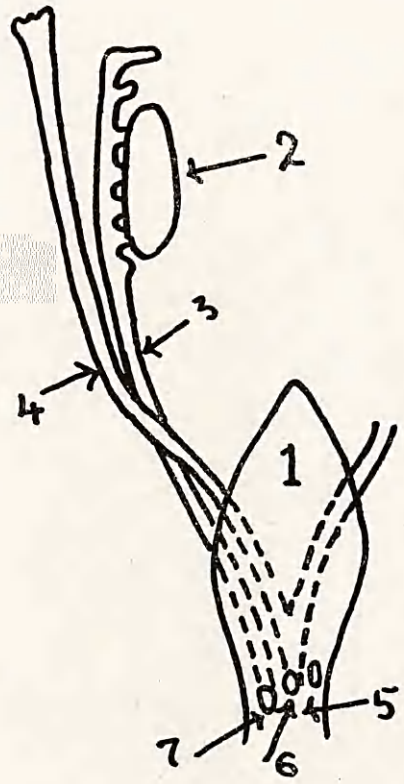


Fig 7

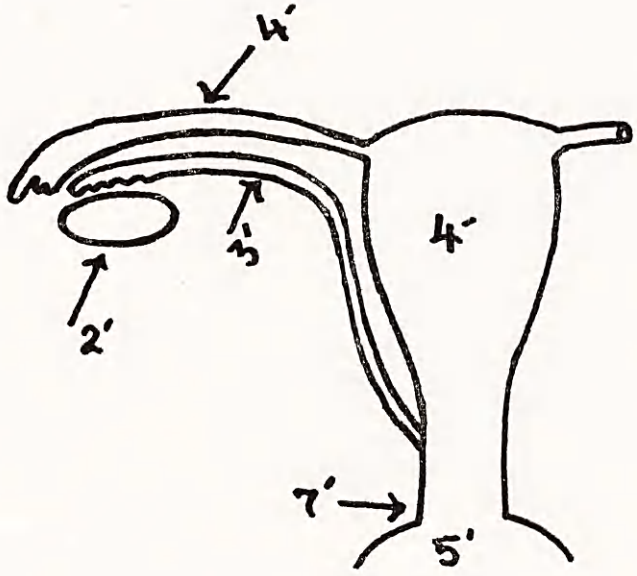
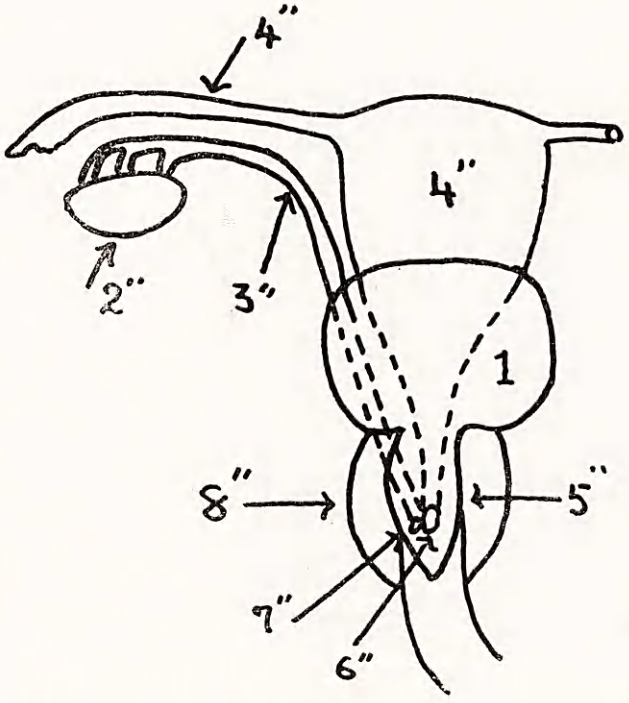


Fig 8



A CASE OF UNUSUAL GENITAL MALFORMATION

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A MUSLIM male aged 45 years was admitted in the G. T. Hospital on 14th September, 1951. He had an empty scrotum and an indirect Inguinal Hernia with undescended testis on the right side, which used to descend in the upper part of the scrotum on occasions but used to remain mainly at the external ring, or in the inguinal canal. It was preoperatively taken as a usual case of an Inguinal Hernia associated with undescended testis. When the hernial repair was undertaken, it showed an abnormal and rare genital malformation. The case is being reported as it showed uterus and adnexa along with testis. This is a very rare type of anomally.

Sex Characters.—

Penis :	Well developed.
Scrotum :	Smaller than usual size for his age on left side.
Hair, Pubic :	Male distribution.
Beard and Moustache :	Very well distributed and developed.
Axillary Hair :	Male type.
Breast :	Male type.
Appearance :	Hefty male.
The distribution of fat throughout the body	Male type.
Voice :	Male type.

Married Life.—Married when he was 15 years of age. Children:—

(1) 1st Child (male) 10 years after marraige, child lived for 10 days only. Cause of death he does not know.

(2) 2nd Child (5 years after the first)—Female living, 11 years old.

(3) 3rd Child—7 months' miscarriage, $2\frac{1}{2}$ years after the 2nd child.

(4) Wife died a year ago.

During his stay on ship he used to remain on board the ship sometimes for 6 months and sometimes for a year away from the wife and relatives.

He enjoyed sexual intercourse with his wife with normal erection of penis and with all the pleasures of the act. He had some sexual contacts with females other than his wife. No history of V.D.

Patient had taken leave from the ship and while resuming duty he was found to possess a right inguinal swelling, at the medical examination.

Right inguinal swelling for 3 years. It appeared suddenly while lifting a heavy weight. It was small at the start, but gradually went on increasing till it reached the present size. The swelling which he can reduce himself, appears after straining efforts.

Local Examination.—Rt. inguinal swelling 3″ × 1″, oval, reaching only the top of the scrotum. The swelling appears after coughing only. The skin over the swelling normal. Cough impulse present. Swelling is soft, ill defined, reducible and dull on percussion.

The left side of the scrotum is empty. Patient states that he has noticed the absence of left testicle since his childhood and also that his right testicle was also occasionally descending into the right scrotum, otherwise it remained in the inguinal area. At the time of examination it could be palpated in the scrotum.

Rt. Ext. ring was very wide and it could easily admit two fingers. Pressure (after reduction of the hernia) applied prevented the appearance of the inguinal swelling.

Thus a diagnosis of indirect inguinal hernia with undescended testis was made.

The operation was undertaken under spinal anaesthesia after the usual investigations and consent. On opening the sac a lump of the size of a walnut was found protruding into the sac. From the sac a mass of anatomy was easily brought out in the operation wound. It had almost exactly the anatomical configuration of an infantile uterus complete with the usual adnexa of the ovaries and fallopian tubes, the presumed testicle now looking exactly like and having the position of a right ovary. The whole mass was intimately covered with peri-

toneum and resembled a Chinese fan, the outer periphery being the right ovary, right fallopian tube, uterus, left fallopian tube and left ovary, the base being formed by the lower part of the uterus. It was impossible to separate the peritoneal covering from it and to tie it up as a separate hernial sac.

It became apparent that unless the dissection was carried out below this abnormal anatomy it would be impossible to cure the hernia. If hernial cure had to be done the mass would have to go as its blood supply would be untenable.

Fortunately the patient was under spinal anaesthesia and he was informed of the awkward situation, that if he wanted a cure of hernia he would have to loose his (?) "testicle", the other course being the closure of the wound without hernial cure.

The man was a sailor and was declared unfit by the certifying doctor for further signing of the articles and resumption of duties as required by regulations. It was therefore of paramount importance to him that he should not lose his job. He pleaded that I should proceed with the operation and give him a hernial cure. His consent was taken for the removal of the abnormal structure and the operation was proceeded with accordingly.

The dissection was commenced on the outer aspect of the hernial sac proximal to this mass and slowly the hearnial sac at its antero-medial aspect was approached and bared. The neck of the sac was tied and all the mass distal to the ligature was removed.

It was impossible to say with naked eye whether the organs in the position of the ovaries were ovaries or not. It was after sectioning and microscopic examination that the true nature of the organs was revealed.

The patient was photographed on the table and during convalescence. The photographs are reproduced in Plate....Figs. 1, 2, 3, 4. They show normally developed external male sexual and secondary characters as well as the position of the specimen as it lay in the body. The accompanying line drawing shows the sites in the specimen from which the histological sections were taken. The specimen is now mounted in the Museum of Pathology of the Grant Medical College, Bombay.

The histological findings* are given below. The sections bearing the same number as the sites shown in the line drawing, Fig. 5.

Site No. 1.—Sections of testis with thick fibrous wall outside. The testicular tubules are atrophied and hyalinised. There is seen a large number of discrete islands or interstitial cells. There is a definite hypoplasia of these cells.

Site No. 2.—Similar to 1—from the other testis.

Site No. 3.—The section which was to the naked eye an ovary shows large number of acini lined by tall columnar epithelium. The structure in histologically that of an epididymis.

Site No. 4.—Shows a thick duct-like structure consisting of a thick layer of involuntary muscle cells. In the centre is a space lined by tall columnar epithelium. This structure does not show the mucous coat of the fallopian tube, but it may be a rudimentary fallopian tube.

Site No. 5.—Shows a tissue consisting of numerous blood vessels resembling the structure of the spermatic cord.

Site No. 6.—Shows histologically similar to No. 5—structure of the spermatic cord.

Site No. 7.—Shows a small duct-like structure with a thick muscle coat consisting of two layers. Outer longitudinal and inner circular. Mucous membrane is columnar and shows a papillary structure—ductus deferens.

Site No. 8.—Section of the uterine wall with endometrium. The glands do not show any evidence of activity such as mitosis or secretion.

It is possible that thick fibrous wall seen outside testis may be ovarian tissue as some areas resembled rudiments of ovarian stroma but not very definitely.

To understand the significance of the specimen, some knowledge of the development of male and female internal genital organs is essential. This is amply showed out in the Figs. 6, 7 and 8.

During the course of embryological development, there is an indefinite stage, where sex is not determined. At this stage, there is a single

*Photomicrographs not received for publication.—EDITOR, *I.M.G.*

genital gland, on either side, which becomes later either an ovary or a testis. Thus, both the duct systems of female and male genital types are present. At a later stage, the sex is determined and the indefinite genital gland becomes either testis or ovary. Along with this, one of the corresponding sex type of duct system undergoes further development, while the other non-corresponding sex type of duct system undergoes retrogressive changes till it is reduced to vestigial remnants.

In the specimen under description, the individual is a true male but the duct system of the female has not degenerated as it should have done; on the other hand it has developed further from the indifferent stage to form the rudimentary uterus and uterine tube. There is a small hole at the lower end of the uterus where it is cut. That opening must be the cut portion of the tube which must be connecting the uterus with the floor of prostatic urethra (original position of the prostatic utricle).

The uterine tube and broad ligaments are in their proper place relative to the uterus. The genital gland is in its proper relation with the uterine tube; but instead of being ovary it is the testis. These organs must be lying in the true pelvis. In the broad ligament immediately below the uterine tube a cord like structure is felt. It is the vas deferens in the position usually occupied by the duct of the epoophoron. The course of the vas deferens is the same as described above for the duct of epoophoron. It must have opened in the prostatic urethra, on either side of the opening of prostatic utricle. Thus the testis instead of being carried into the scrotum by the pull of gubernaculum has obeyed the greater pull of the paramesonephric duct and has migrated into the pelvis.

Acknowledgment

We are thankful to the Principal, Grant Medical College, Bombay, for facilities for study.

FAMILY PLANNING WORK IN LUCKNOW

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Introduction

FAMILY Planning work was started in Uttar Pradesh in the month of March, 1951. Sri H. P. Mody, Head of the State, and the health authorities took a keen interest in this work. To begin with, the activities were confined to Lucknow, the Headquarters of the State, so that the public reaction and response could be watched by all concerned. This report covers a period of 15 months—March, 1951 to May, 1952.

Agency.—The Uttar Pradesh Government gave a grant of Rs. 10,000 to the State Branch of the Indian Red Cross Society. A Family Planning Sub-Committee has been formed at the Headquarters. It has 10 members, six of whom are ladies. The Chairman of the U.P. Legislative Council was nominated Chairman of the Sub-Committee. The other members comprise of a Lady M.L.C. and 8 doctors representing the Services and the independent medical profession.

For guiding and supervising the day-to-day work, there is a small Committee on which the Municipal Board and the Hospitals undertaking this work are represented.

Objectives.—The first step was to impress upon the people through intensive propaganda the urgent need for limitation of the family. It was also decided to hold Planned Parenthood Clinics at a number of places in the city. The women of the locality could attend these clinics, purchase literature on the subject, and have themselves examined medically regarding their individual needs. They could buy at the clinics and at concessional rates contraceptives recommended by the doctor. They could also have individual instructions regarding the actual method of using the contraceptives or of fitting the diaphragms.

Buildings and Equipment.—The municipal and other hospitals were selected as the places