

## GYNAECOLOGICAL PROBLEMS IN TEENAGERS

by

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The purpose of this paper is to emphasize the role of the gynaecologist in the care of the adolescent patients. The problems occurring at this period which concerns the gynaecologist should be evaluated and treated carefully. Though generally healthy, the adolescent patient is frequently brought to the gynaecologist for complaints similar to the older age group or because the mother is anxious about her child and the family doctor has little interest in her problems. Ultimately those with pelvic complaints will reach the gynaecologist, but one should remember that this vulnerable age group can have serious pelvic disease.

### *Material and Method*

For the purpose of the study we collected patients belonging to the age group of 13-19 years, at random, from the indoor and out-patient departments of the Cama and Albless Hospitals. The following is an analysis of these 500 patients.

TABLE I  
*Age Distribution*

Age	No. of cases	Percentage
13	32	6.4
14	45	9.0
15	52	10.4
16	73	14.6
17	84	16.8
18	101	20.2
19	113	22.6

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Table I shows the age distribution and percentages in the entire series. From this table it will be seen that the greater number of patients belonged to the age group 16-19 years. In the first few years of perimenarchal period, the cycles being anovulatory and irregular, the mothers are not worried. It is only when the girl has pain, excessive bleeding or amenorrhoea that she is brought to the gynaecologist for examination and advice.

TABLE—II  
*Marital Status by Age Group*

Age	13	14	15	16	17	18	19	Total
Married	6	14	24	31	62	71	91	299
Unmarried	26	31	28	42	22	30	22	201

This table shows the marital status by age group. Of the total of 500 patients, 299 (59.8%) were married and 201 (40.2%) were unmarried. Since early marriages are common in India it is not surprising that 59.8%, i.e. more than half of these girls, were married.

In this table the patients are grouped according to their presenting symptoms. This table shows that the highest number of patients had menstrual disturbances. Of these 387 patients who had menstrual disturbances, 156 patients had menometrorrhagia. In this group we included patients who presented to us with either abnormal or excessive uterine bleeding. Bleeding was often superimposed on a pattern of oligomenorrhoea or amenorrhoea. According to Bectere Cl. (1966) in

TABLE III  
Presenting symptoms

A.	Menstrual disturbances	....	387
	(a) Menometrorrhagia	....	156
	(b) Hypomenorrhoea	....	48
	(c) Oligomenorrhoea	....	62
	(d) Amenorrhoea	} Primary 41 }	58
	(e) Dysmenorrhoea	} Secondary 17 }	63
B.	Leucorrhoea	....	49
C.	Dyspareunia	....	9
D.	Prolapse	....	11
E.	Pelvic and abdominal pain	....	19
	(a) Pelvic inflammation	....	19
	(b) Ectopic pregnancy	....	9
	(c) Tumours	....	7
	(d) Haematometra & haematosalpinx in a rudimentary horn	....	1
F.	Miscellaneous		
	(a) Bartholin cyst	....	4
	(b) Vulval injuries	....	2
	(c) Vaginal cyst	....	1
	(d) Vestibular anus	....	1
	Total	....	500

95% of young girls, the uterine haemorrhages are purely functional and of hormonal origin, and the same disorder persists in 10% of young women.

Samples and Weed (1966) say that idiopathic thrombocytopenic purpura is a blood dyscrasia predominantly of the younger age group. Almost 50% of the patients with thrombocytopenic purpura have hypermenorrhoea often beginning in the postmenarchal years. Postmenarchal hypermenorrhoea which does not respond to conventional treatment should suggest a blood dyscrasia.

Southam and Richart (1966) found that 50% of the adolescents with *dysfunctional bleeding* had normal periods within four years of the onset and the remaining continued to have trouble. In our series of 156 patients who had menometrorrhagia, 13 patients had dilatation and curettage and 15 patients had one or more blood transfusions for severe anaemia.

Of these 13 patients who had dilatation and curettage, 8 patients showed a proliferative pattern of endometrium, one had cystic glandular hyperplasia, two had tubercular endometritis and in two patients the tissue was autolysed. One of the patients belonging to this group had a growth on the cervix which was biopsied and was found to be chronic inflammation on histopathology. Of the 15 patients who had received one or more blood transfusions, one patient expired. This patient was a girl of 14 years admitted to the hospital with history of bleeding per vagina off and on for two months with haemoglobin of 16%. She had received five blood transfusions.

There were 48 cases of *hypomenorrhoea* in this series. Hypomenorrhoea is a relative term and depends on what the patient describes as the quantity of menstrual flow. Of the 48 patients, 28 were married and 20 unmarried. The cause of

hypomenorrhoea was underdeveloped uterus in 13 patients and tubercular endometritis in three. In the remaining 32 patients it was unknown. Tuberculosis must not be forgotten as a cause of scanty periods especially in the low socio-economic group.

*Oligomenorrhoea* is defined as a menstrual pattern in which the uterine bleeding occurs at intervals of more than six weeks but less than a year. In this series there were 62 patients with oligomenorrhoea. Southam and Richart (1966) found in their series that those whose irregularity began at menarche had a greater probability of remaining oligomenorrhoeic than those who established a normal pattern and secondarily developed this symptom. Of these 62 patients, 19 were unmarried and 42 were married. Clinically, of the 62 patients, 12 had underdeveloped uterus and 5 were markedly obese. It is common to find these girls come for sterility and they are worried because the periods are irregular, though this may not be the cause of their sterility. These patients need to be followed up to determine their fertility status.

There were 58 cases of *amenorrhoea* in this series, 41 had primary and 17 had secondary *amenorrhoea*. Of the 41 cases of primary *amenorrhoea* all were over the age of 18 years except for those who had congenital anomalies of the genital tract. Behrman (1966) states that since the greatest number of young females have started their menses by the age of 16 or 17 years, a delay beyond this age should be considered as primary *amenorrhoea*, necessitating evaluation and therapy.

Table IV shows the type of congenital anomalies found in these 41 patients. Of the 6 patients who had normal pelvic organs, two of them had poorly develop-

TABLE IV  
*Primary Amenorrhoea*

Normal pelvic organs	...	..	6
Complete absence of genital tract		..	12
Partial absence of genital tract (Vagina only)	..	..	5
Underdeveloped uterus	..	..	12
Turner's syndrome	..	..	1
Transverse vaginal septum	..	..	4
Imperforate hymen	..	..	1

ed secondary sex characters and were chromatin positive (i.e. female type). In the other 4, no other abnormality could be detected. These 6 cases may be considered as delayed puberty. In 12 patients there was complete absence of genital tract. These patients are quite a problem to a gynaecologist. There were 5 patients who had partial absence of genital tract. They had only the vagina well developed with no uterus and cervix or with a small nodule at the vault. Twelve patients had underdeveloped uterus; one was a case of Turner's Syndrome; 4 had transverse vaginal septum and one had imperforate hymen.

There were 17 patients with secondary *amenorrhoea* ranging from 1 to 4 years. Of these 17, there were 10 married women and 7 unmarried. Nine of them had underdeveloped uterus, one had severe anaemia (Hb. 20%) and one had associated hirsutism. No follow-up was available of these patients.

*Dysmenorrhoea* was another complaint for which some of them came to the hospital. There were 63 girls with *dysmenorrhoea*, of whom 29 were unmarried and 34 married. Severe incapacitating *dysmenorrhoea*, when school work or domestic duties are interrupted for a day, was rare among this class of patients. Of these, 60 patients had spasmodic *dysmenorrhoea* and 3 had congestive *dysmenorrhoea*. Of the 34 married women

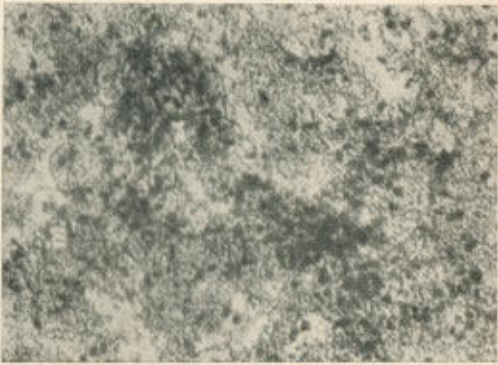


Fig. 1  
Smear showing good clumping, plenty of Doderlin bacilli and cytolysis, nuclei mostly vesicular, cornification index upto 20%: Class A.



Fig. 2  
Smear showing almost the same picture as Fig. 1 except that the cornification index goes upto 30%: Class B.

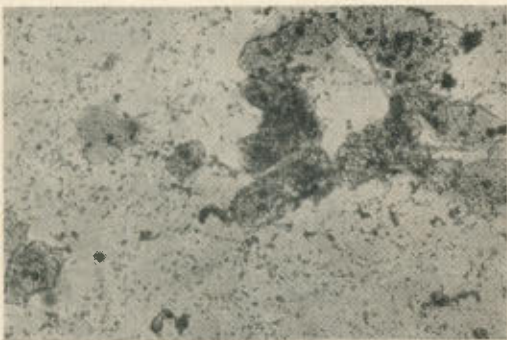


Fig. 3  
Smear showing moderate clumping, some discreteness less number of Doderlin bacilli and cytolysis cornification index upto 40%: Class C.

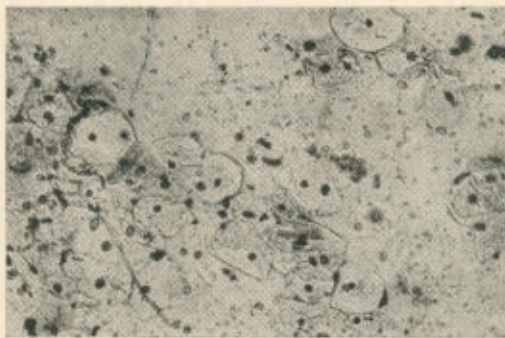


Fig. 4  
Smear showing flattened and discrete cells, very few Doderlin bacilli and cytolysis, some R.B.C. cornification index upto 50%: Class D.

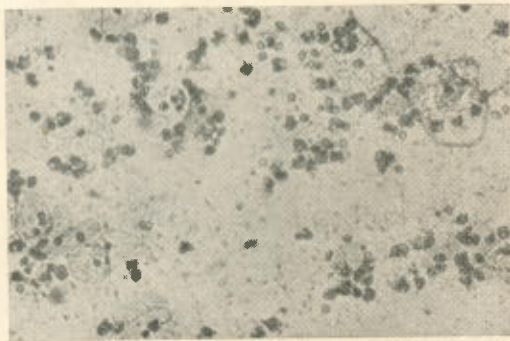


Fig. 5  
Smear showing more discrete and flat cells, Doderlin bacilli and cytolysis almost nil, more cocci, R.B.C. and leucocytes, fair number of keratinized cells and cornification index above 50%: Class E.



Fig. 1  
Non specific chronic endometritis—Photomicrograph shows endometrial glands with presence of round cells infiltration in stroma.



Fig. 2  
Tuberculous endometritis — Photomicrograph shows an endometrial gland and granulomatous lesion consisting of epithelioid cells. Langhan's giant cells and showing dense zone of lymphocytic infiltration.

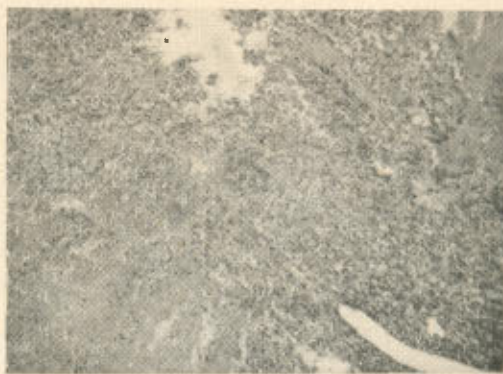


Fig. 3  
Syncytial endometritis—Photomicrograph shows endometrial glands. Syncyetal cell in centre, area of necrosis, and inflammatory reaction.



Fig. 1  
Hysterosalpingogram, showing two separate horns.

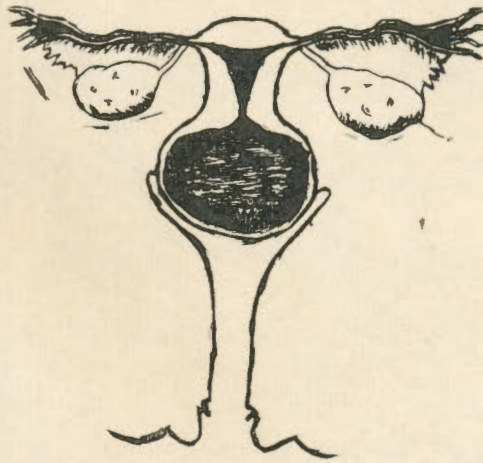


Fig. 1  
Diagrammatic representation of haematocollis.

A Case of Testicular Feminization Syndrome—Ghosh et al pp. 105-108



Fig. 1  
Histopathological section of gonad in low power 80 x.

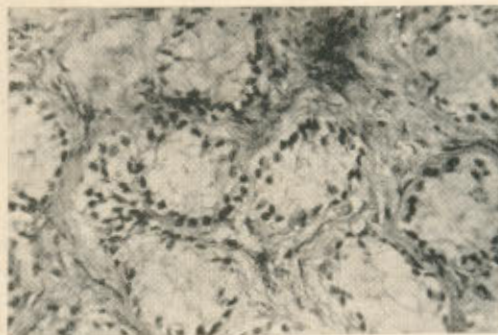


Fig. 2  
Histopathological section of the gonad in high power 320 x.

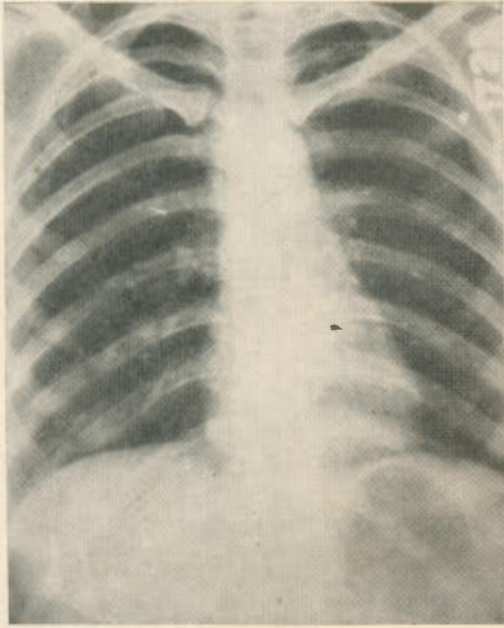


Fig. 1  
Microphotograph of choriocarcinoma showing sheets or columns of Langhans cells, mostly infiltrating into uterine.

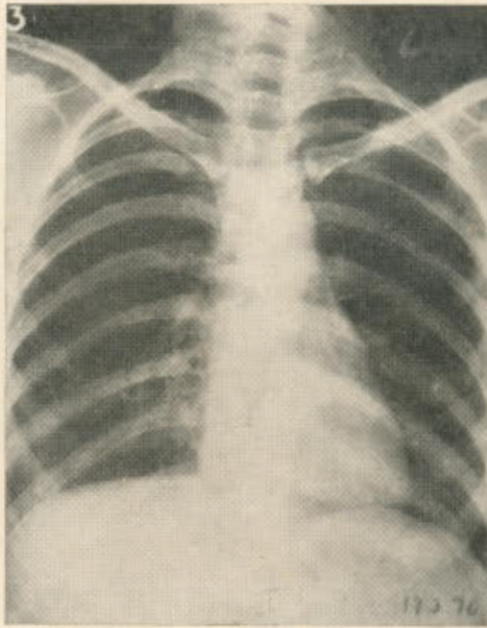


Fig. 2  
Dry chest PA view showing secondaries (B2 cannon ball shadows in the left side near apex and one in the right side at the base.

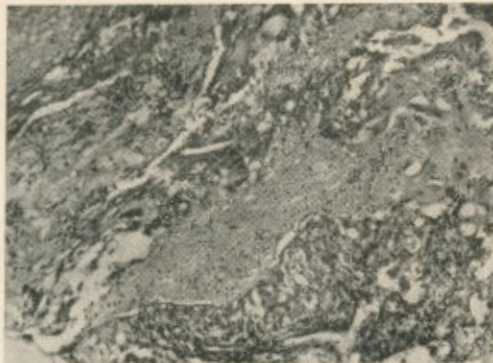


Fig. 3  
Chest PA view shows the disappearance of metastatic shadows after treatment.

with dysmenorrhoea 22 had this symptom which persisted even after childbirth. It is believed that indoctrinating young girls in regard to the physiology and objectives of the menstrual function, results in reducing the rate of dysmenorrhoea.

Another common complaint was *leucorrhoea*. In this group there were 44 married and 5 unmarried girls who had come to us for leucorrhoea. The cause of the discharge was trichomonas infection in 17, monilial in one, gonococcal erosion of the cervix in 9 and non-specific vaginitis in 21.

*Dyspareunia* was complained of by 9 patients, 3 of whom had a transverse septum, one had a vertical septum, one had a tough hymen and in another it was due to severe vaginitis and vulvitis; in the remaining 3 it was due to psychogenic factors.

Another important problem which faced us was *prolapse* of the genital organs. In this series there were 11 patients with different types and degrees of prolapse, 10 were married and one patient was unmarried; 6 patients were

nulliparous. The youngest patient who had prolapse was 16 years old.

Of the six patients who were nulliparous, all had third degree prolapse. Three of them had cystocele and rectocele which is uncommon in nulliparous women who usually have hypertrophic elongation of the cervix without cystocele and rectocele. Of the 5 parous women, two had third degree prolapse following two full term normal deliveries, two had second degree prolapse following one full-term normal delivery and another patient had second degree prolapse following a full-term stillbirth, though the delivery was normal. This patient had stress incontinence also.

The above table shows the age, type of prolapse and the treatment given to these patients. Most of them were between the ages of 16 to 18 years. In the nulliparous group there was a case of twin sisters, both of whom had third degree prolapse. Cervicopexy was done in both patients. Both were unmarried at the time of operation. One of them got married and has had one full-term normal delivery without any recurrence. In

TABLE V  
*Prolapse*

Nulliparous				
No.	Age	Degree of prolapse		Op. performed
1	18	IIIrd degree with cystocele and rectocele		Manchester
2	18	" " "		Manchester
3	18	" " "		Manchester
4	19	IIIrd-degree, No cystocele and rectocele		Cervicopexy
5	19	" " "		Cervicopexy
6	16	" " "		No follow up
Parous				
No.	Age	Degree of prolapse	O.H.	Type of operation
7	19	IIIrd degree with cystocele & rectocele	2 F.T.N.D.	Manchester
8	17	" " "	2 F.T.N.D.	Manchester
9	19	IIInd degree with cystocele & rectocele	1 F.T.N.D.	Repair
10	17	" " "	1 F.T.N.D.	Repair
11	18	" " "	1 F.T.N.D.	Repair



the remaining patients either the Manchester operation, or Purandare's cervicopexy was done according to the surgeon's choice.

From this small group it will be seen that prolapse can occur in the very young patient also even without childbearing. In India, women marry even before puberty and have children between 14 to 20 years. So it is not surprising to see prolapse in such young girls. The problem, however, arises as to the operation of choice, so as to preserve the childbearing function as well as to give good support to the pelvic organs. The time honoured Manchester operation is giving place in India to Shirodkar's sling operation and Purandare's cervicopexy.

Thirty-six patients presented with either *abdominal* or *pelvic pain*. Of these, 30 were married and 6 unmarried. Pelvic inflammation was the cause in 19 patients, of whom 2 were unmarried. In 4 patients (including these 2 unmarried patients) the cause of pain was due to genital tuberculosis. In the remaining 15 patients it was non-tubercular pelvic inflammation. Henderson *et al* (1966), in a series of 69 cases of pelvic tuberculosis, found 6 cases under the age of 20 years. The incidence is higher in India where malnutrition and low socio-economic status are responsible factors.

Ectopic pregnancy was responsible for abdominal pain in 9 patients, seven of them came with acute ruptured ectopic pregnancy and had to be operated on immediately; 2 had sub-acute symptoms and were under observation for 3-5 days prior to operation.

Tumours were responsible for pain in the abdomen in 7 patients, 3 of whom were unmarried and 4 were married. One patient had haematometra and haematosalpinx of the rudimentary horn, and one had a twisted hydrosalpinx and was

admitted as an emergency and operated on immediately. The other tumours were ovarian in origin; 2 were dysgerminomas, 1 dermoid, 3 simple serous cysts. All these ovarian tumours were unilateral.

TABLE VI  
*Surgical procedures*

No.	Type of Operation Performed	No. of cases
1	Dilatation and curettage	13
2	Salpingectomy	9
3	Ovariectomy	2
4	Ovarian cystectomy	4
5	Prolapse repair	11
6	Bartholin cyst excised	4
7	Suturing of post-coital tear	1
8	Incision of vulval haematoma	1
9	Excision of vaginal septum	5
10	Excision of rudimentary horn	1
11	Hymenectomy	1
12	Utriculoplasty	1
13	Excision of vaginal cyst	1
Total		54

The above table shows the surgical procedures carried out in our series. Of the 500 patients, 54 required various types of surgical procedures giving an incidence of 10.8%. Kenneth and Baldwin (1965), in their series of 199 adolescent patients studied, had no surgical procedures performed and find that most of the gynaecological problems can be handled without surgery.

#### *Comments*

It appears from the analysis of 500 patients given above that the adolescent patient needs special attention. This group has the same disorders as the older age group but is likely to be ignored by the family physician as on the whole they are healthy. Most of the conditions can be handled conservatively except for those like ectopic pregnancy and ovarian tumours which need surgery. Congenital malformations of the genital tract are interesting and are seen in high-

er proportion in hospital practice. They may be responsible for pelvic and abdominal pain when haematometra or haematosalpinx occurs. Operations for formation of artificial vagina are numerous but are not advocated by most gynaecologists in India due to our special social problems. More than half the patients with menstrual disturbances had menometrorrhagia. A few of these needed admission to the hospital for dilatation and curettage and blood transfusions. With the introduction of oral progestogens bleeding can be controlled and dilatation and curettage avoided. Besides this the risk of psychic trauma is avoided in the young unmarried girls. In the group with ovarian tumours, 4 out of 6 were benign. Two patients had dysgerminomas and being young, 17 and 19 years of age, only the affected ovary was removed. The general opinion is that in young girls the uterus and the other ovary should be preserved and the girl kept under observation. In this series one of the two patients who was operated on for dysgerminoma became pregnant and delivered normally proving the advisability of conservative surgery in young patients.

A number of patients in this age group came for breast condition, parasitic infections of the gastro-intestinal tract and skin infections. These have been excluded from this paper though a suggestion

has been made that breast affections should be included under gynaecological conditions.

#### *Summary*

A random sample of 500 patients between the ages of 13 to 19 years was selected for the purpose of study. An analysis of their age group, marital status, and presenting symptoms is described. More than half the number of patients in the present series were married. Symptoms correspond to those seen in the gynaecological patients of older age group. Operative procedures were required in 10.8% of the patients in this series.

#### *Acknowledgement*

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