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CONTENTS

APOLOGY

Due to certain unavoidable circumstances, the May-August issue was not published and has been incorporated in the present issue.

Editor.

The Journal of the A.M.W.I.

VOL. LXXIII MAY-DECEMBER, 1983 No. 2 & 3

CONTENTS

The XIX World Congress of the Medical Women's International Association will be held from 29th July 1984 to 4th August 1984 at Hotel Vancouver, Vancouver, BC, CANADA.

The topic of the Congress will be "Men and Women, Biological and Behavioural Differences."

The Registration fees are

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TUBAL SURGERY—REVIEW OF 25 CASES

by

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Introduction

Since 1884, when Schroder first demonstrated unilateral ampullary cuff-salpingostomy, tubal surgery for infertility has undergone tremendous metamorphosis. However in the past, tuboplasty was never gratifying procedure until recently when microsurgical techniques were introduced. For decades gynaecologists have been trying to improve results of their tubal surgery with hoods, splints, hydrotubation along with drug manipulation. These endeavours failed to achieve expected improvement and many fell into disrepute and later were condemned.

Today with advances in surgical techniques and with the help of magnification, delicate tissue handling with excellent haemostasis is possible. In addition the very fine and superior quality of suture material available today add up in a big way in achieving very gratifying results.

Material and Methods

In the present study we have attempted to review 25 cases of tubal surgery performed in our institution. Of course these were the cases where all other factors for infertility like male factors, cervical factors, uterine factors, endocrine factors etc. had been excluded and only the tubal factor was at fault.

About the outcome of the operations, patients were followed up by postal correspondence and results were obtained with the help of local gynaecologists of the patients.

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Our data analysis were as follows:

TABLE I
Age Distribution

Age in years	No. of patients	Per cent
21 - 25	6	24.0
26 - 30	10	40.0
31 - 35	7	28.0
36 and above	2	8.0

Age distribution was as shown in Table I. While the majority of patients fell between the age group of 21 and 30, there were a few patients even in late thirties.

TABLE II
Parity

Parity	No. of patients	Per cent
Nil	16	64.0
1	4	16.0
2	3	12.0
3 and above	2	8.0

64% of our patients were cases of primary infertility, while 16% of patients were cases of secondary sterility. The remaining were the patients who were desirous of recanalisation (reversal of sterilisation operation) on account of either demise of male child or more than one perinatal losses.

TABLE III
Duration of marriage

Years	No. of patients	Per cent
More than 2	0	—
3 - 5	6	24.00
6 - 8	11	44.00
9 and above	8	32.0

Majority of our patients were married for a period of 3 to 8 years. At the same time we had 8 patients (32%) who were married for over a period of 9 years. These were the patients who had come to our institute as last resort after being unsuccessfully treated elsewhere.

Hysterosalpingography and Laparoscopy with patency test

TABLE IV
Hysterosalpingography

Findings	No. of cases
Proximal tubal occlusion	10
Distal tuba occlusion	6
Unsatisfactory spillage	4
Terminal hydrosalpinx	1

TABLE V
Laparoscopy and patency test

	Findings	Number
1.	No spillage of dye	16
2.	Unsatisfactory tubal patency with delayed spillage	4
3.	Tubal sterilisation with no dye spillage—	
	Bands	2
	Minilap	2
	Clip	1
4.	Multiple adhesions	6
5.	Presence of endometriotic patches	2
6.	Ovarian cysts	2
7.	Terminal hydrosalpinx	1

After subjecting our patients to routine investigations to rule out other factors of infertility, they were subjected to hysterosalpingography and laparoscopy. In our opinion both these procedures are complementary and one cannot substitute one for the other in pre-operative assessment of oviduct.

Inspite of proximal tubal occlusion seen in 10 cases, laparoscopy did not demonstrate tubal block in all these cases, this fact further highlights the necessity for using both these procedures complementary.

Types of operation

After ascertaining pre-operative fitness, patients were subjected to laparotomy wherein following procedures were performed.

1. **Adhesiolysis**

Here the adhesions were released with the help of sharp and meticulous dissection using cautery whenever required thereby decreasing oozing from raw area which might lead to reformation of adhesions.

2. **End to end anastomosis**

Here, with the help of dye being injected in uterine cavity exact site of tubal block was detected. The diseased parts were then removed till healthy tubal tissues were seen. Reanastomosis was then followed using a small nylon splint whenever required. The splint was removed after 72 hours.

3. **Recanalisation**

The ligation site was first carefully examined and then removed with dissection till patent tube was seen, reanastomosis then followed using nylon splint whenever required.

4. **Cornual implanation**

In this procedure, the blocked proximal portions of tubes were

removed and by creating a new opening at cornual site the tubes were implanted on uterus using top slap vein tubing as splint.

In the above 3 procedures, 4-0 to 6-0 Prolene was used to approximate mesosalpinx and 6-0 dexon or vicryl was used for the anastomosis of tubes.

5. Salpingostomy and fimbriolysis

This was done in the case with terminal hydrosalpinx. First fimbrial adhesions were released carefully, then dye was injected, but due to unsatisfactory spillage of dye salpingostomy was performed.

TABLE VI
Type of Operation

Type of operation	No. of cases
Adhesiolysis	9
End to end anastomosis	3
Recanalisation	5
Cornual implantation	6
Salpingostomy fimbriolysis	1

TABLE VII
Additional procedures

Additional procedure	No. of cases
Omentectomy	18
Appendicectomy	16
Cystectomy	1
Wedge resection	1
Peritoneal graftings	5

Omentectomy was done with a view of decreasing post-operative adhesions.

Appendicectomy was done to avoid chances of repeated laparotomy and adhesions formation.

Peritoneal grafting was done to cover bad patch of raw surface after adhesiolysis, thus decreasing chances of adhesions.

In all of the above operative techniques a few principles were observed to achieve best results.

(1) Meticulous and absolute haemostasis.
(2) Delicate tissue handling with due tissue respect.
(3) Use of fine suture material like 4-0 to 6-0 Prolene, 6-0 Dexon, 6-0 Vicryl etc.
(4) Use of magnifying glass, loops whenever required.
(5) Good peritoneal lavage and then keeping haemacel in peritoneal cavity to keep viscera floating decreasing chances of adhesions.

(6) Hydrocortisone acetate was kept in peritoneal cavity with the view to cover raw area and thus decrease adhesions.

(7) Second look scopy was performed in a few cases after 2 months to remove weak adhesions formed post-operatively.

Pregnancy rate

Total number of pregnancies	—	8 (33.33%)
Full term deliveries	6	
Abortion	1	
Ectopic	1	

Types of deliveries

Normal delivery	..	2
Forceps	..	1
Lower segment caesarean section	..	3

Indications for lower segment caesarean section

Cornual implantation	..	1
Foetal distress	..	1
Antepartum haemorrhage	..	1

In the above series there were 8 confinements i.e. 33.33% success rate out of which one aborted at 2½ months amenorrhoea and one had an ectopic pregnancy. Six patients carried on till full term, out of which 3 patients were delivered by lower segment caesarean section due to above mentioned indications, giving them live babies.

Conclusion

Apart from in vitro fertilisation and test tube baby, both of which being not practical in our country at present, tubal surgery offers only solution in patients with tubal factors in infertility. It is an extremely demanding line of treatment, which asks for almost technical expertise and with bit of luck on patients part, favourable outcome can be achieved, while our pregnancy rate of 33.33% is encouraging, much better results can be awaited with advancement in techical know-how in the field of tubal surgery.

Acknowledgement

We take this opportunity to thank the Dean, N. W. Maternity Hospital, Bombay, for permitting us to report the hospital data.

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THE ROLE OF CAESAREAN SECTION IN PREGNANCIES FOLLOWING TUBAL SURGERY

by

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Introduction

In the last decade a large number of women have been sterilised surgically and it is inevitable that some of them in changed circumstances would wish that their fertility be restored.

When a patient has to undergo conservative pelvic surgery for improvement of fertility, there is little room for short cuts, guesswork, suppositions or assumptions. Every available diagnostic modality must be utilised so that the surgeon is as knowledgeable as is possible. The surgeon is invariably asked by the patient, directly or obliquely. "What do you think my chances are?"

The response should be based on prior experience with similar cases, full consideration of the anticipated surgery, familiarity with the literature, and a comprehensive knowledge of facts as they pertain to the specific patient. This study deals with such an evaluation.

The cardinal essentials of tissue handling, accurate approximation, meticulous haemostasis and minimal tissue trauma are the hallmarks of the surgical approach. No pharmacological manipulations to reduce infection and adhesion formation can substitute for technique.

This is the review of 75 cases where Tubal reconstructive surgery was undertaken in order to restore fertility. The role and necessity of Caesarean Sections in the pregnancies that followed tubal surgery is being evaluated in this study:

64% of the cases (Table I) were between 21-30 years of age. These patient were more anxious for Baby as they conceived after prolonged period. They visited Antenatal clinic regularly.

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TABLE I
Age

Age (years)	No. of cases	% age
Less than 20	01	1.3%
21-25	17	22.7%
26-30	31	41.3%
31-35	17	22.7%
36 & above	09	12.0%

TABLE II
Parity

Parity	No. of cases	% age
nil	56	74.5%
1	03	4.0%
2	16	21.5%

Table II shows that 74.5% of our cases were of primary sterility. 4% had secondary sterility and 16 cases wanted recanalisation following tubectomy for various reasons.

TABLE III
Duration of marriage

Diration (years)	No. of cases	% age
More than 2	—	—
3-5	19	42.7%
6-8	32	25.3%
9 & over	24	32.0%

Almost 57% of our cases (Table III) were married for more than 5 years. Before operating to restore tubal patency all relevant medical records must be studied. It must be shown that the husband's semen is normal. It may be useful to perform HSG. Sometimes the pelvic organs should be studied by laparoscopy. These are not mutually exclusive but complementary. Failure to do one or the other will result in error of judgement on the part of the operator. Our experience has also counselled to repeat these procedures if there is even minimal doubt as to the previous findings.

TABLE IV
Tubal surgery

Surgery	No. of cases	% age
Adhesiolysis	26	34.8
End to end anastomosis	10	13.4
Recanalisation	16	21.1
Cornual implantation	20	26.7
Salpingostomy	03	4.0

The success of all infertility surgery has been founded on an approach which minimizes the likelihood of post-operative adhesons, maintains oviductal patency and restores the normal relationship of the oviductal fimbria on each side to the respective ovary. The connerstone of this approach is prevention of the initial inflammatory reaction coincident with surgery. Avoidance of tissue injury and ischaemia is the first line of defence against subsequent inflammation.

TABLE V

Tubal Recanalisation (16)

Type of sterilisation	No. of cases	% age
(a) Band	04	25%
(b) Cautery	01	6.2%
(c) Pomeroy	07	43.8%
(d) Madlener	04	25.0%
Route of Sterilisation:		
(a) Laparoscopic	04	25%
(b) Puerperal	10	62.5%
(c) Minilap	02	12.5%

Tubal anastomosis following sterilisation is one of the most satisfying procedures, partly because the surgical techniques involved are very precise and partly because this surgery is much more likely to result in pregnancy than are most operations on infertile patients. The least destructive mehods of sterilisation tend to be the most reversible. In our hands, isthmoisthmic anastomosis seems to offer the best chances of success, while ampullary anastomosis is less reliable. A history of previous sterilisation requires verification and elaboration of details. Patients are notoriously ignorant of most details and original operation report should be obtained. If cautery was used, the result will depend on how many sites were coagulated, the amount of current and the length of its application.

Potential for reanastomosis following Pomeroy's tubal ligation is usually good unless too large loop is encased by the suture.

The Silastic band involve 2-2-5 cm of isthmic tube the immediately adjacent tube has been known to be normal and the prognosis for repair is excellent.

TABLE VI

Pregnancy rate 33%

Pregnancy	No. of cases (25)	% age
Full term	19	76.0%
Premature	01	4.0%
Abortion	03	12.0%
Ectopic	02	8.0%

The pregnancy rate (Table VI) in our series was 33% over a follow up period of 3 years. One of the difficulties encountered in comparing

pregnancy rates has been the variability of follow up periods. Since the pregnancy rate is a function of time, the larger the period of follow up, the higher the pregnancy rate. Therefore, pregnancy rates calculated without reference to time are an inadequate basis for comparison of treatments.

TABLE VII
Type of delivery

Delivery	No. of cases (20)	%age
Normal delivery	05	25%
Forcep	03	15%
LSCS	12	60%

25% of the cases that became pregnant following tubal surgery delivered normally. While 60% required LSCS for obstetric problems complicating delivery.

TABLE VIII
Indication for LSCS

Indication	No. of cases	% age
Foetal distress	03	25%
Placenta Praevia	01	8.3%
Abnormal Presentation	02	16.7%
Cornual implantation (Elective)	06	50%

Table VIII shows that elective LSCS was resorted to in 6 of the 12 cases (or 50%), that required operative interference because of a previous cornual implantation. None of these cases has signs and symptoms of threatened rupture.

Caesarean section during the past 35 years has become an increasingly popular operation. The rise in incidence has been especially noteworthy since the mid 1960's. There are several valid reasons for this upsurge in the frequency of use, but the basic justification lies in the lowering of the maternal mortality with an increasing foetal salvage rate as compared with certain operative means of vaginal delivery. The fundamental concern today is not an arbitrary percentage incidence of Caesarean delivery but what is the best method of delivery for mother and baby when inter-current disease exists as Obstetric complication

Hence a new indication for LSCS has been evolved and formed necessary in modern obstetrics. This study further highlights the changing trends in the indication of LSCS in an endeavour for a healthy mother and healthy child in this modern era.

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CHRONIC ECTOPIC PREGNANCY

Report of 2 Cases

by

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Ectopic pregnancy has a notorious reputation of mimicking various diseases and system complexes ranging from acute abdomen to pelvic inflammatory disease to ovarian tumors. The diagnosis often eludes many expert clinicians also. The aim of following case reports is to show how the diagnosis of ectopic pregnancy was made, only after going through many clinicians and undergoing a gamut of investigations, both invasive and non-invasive.

Case Reports

Case 1: Chronic Tubal Pregnancy

Mrs. G., a 22 year old Hindu female came to our Gynaecology O.P.D. on 12-2-1983 with history of secondary sterility of 3½ years duration.

Menstrual History

— Her last menstrual perod was on 15-1-1983.
— Her present cycles are irregular (30-45 days) with moderate flow and painless.
— Past menstrual history—Her last regular period was about 1 year ago, after which she had period of 1 month amenorrhoea followed by irregular periods.

Obstetric History

One male child 4 year old—A full term normal delivery. Post-partum period was uneventful.

Past History

History of miliary tuberculosis in childhood for which a complete antituberculous treatment was taken.

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— History of dilatation and curettage on 9-8-1982 in a private hospital for bleeding per vaginum with 1½ M.A., Reports showed endometrium to be under progesterone effect.

— History of dilatation and curettage with laparoscopy 3 months ago in another hospital, reports of which were not available.

On Examination

— General condition fair, temperature—afebrile Pulse—76% min. regular, good volume. Blood pressure—110/70 mm of Hg. No pallor. No lymphadenopathy. Systems—CVS, RS, GI and CNS—N.A.D.
— Per abdominal examination—subumbilical scopy scar seen. No other abnormality detected.

Per vaginal examination

Per speculum—No abnormality detected.

Per vaginum—uterus retroverted, retroflexed, smooth, firm, normal size with restricted mobility, cervical movement non-tender.

Fornices—Left—A mass was felt in the dimensions of about 6 x 4 x 4 cms of vairegated consistency with irregular surface and restricted mobility. Right fornix was clear.

Per rectal examination—findings of per vaginum examination confirmed.

Provisional diagnosis

— Left sided tubo-ovarian mass
— Left sided ovarian cyst
— Ectopic pregnancy

Investigations

Blood group: B +ve	Hb. 11.5 gms%
WBC—Total 9000/cmm	B.T.—1'-40"
Diff. N.72%, L.24%	C.T.—3'-00"
M.2%, E.2%	Plasma fibrinogen—360 mg%
Urine—N.A.D.	Platelet count—2.21 lac/cmm
Stool—N.A.D.	
Blood sugar—Fasting 95 mg%	VDRL—negative
PPBS—105 mg%	

X-ray chest—no abnormality detected
X-ray abdomen—A soft tissue shadow seen on left side
Ultrasonography—Ovarian cyst of 8 x 6 x 6 cm size on left side
Husband's semen—60 million, 70% motile, 70% normal.

In view of secondary sterility with a pelvic mass, patient was posted for laparoscopy—S.O.S. exploratory laparotomy.

Laparoscopy findings

Uterus—normal size. Posterior surface showed a few omental adhesions.

Tubes—Left—ampullary region showed a mass with necrotic areas, clotted blood adherent to it, involving fimbrial end. Right—normal size, healthy.

Ovaries—Could not be visualised properly due to presence of old clotted blood with blood stained peritoneal fluid filling Pouch of Douglas and rest of pelvic cavity.

Diagnosis of chronic tubal ectopic of left side was made and patient was explored immediately.

Exploratory laparotomy findings

— Peritoneum showed bluish discolouration.
— Peritoneal cavity—150 ml of old clotted blood removed.
— Uterus—normal size, posterior surface showed omental adhesions.
— Tubes—right—healthy.
—left—ampullary end showed a chronic ectopic involving fimbrial end also.
—Macerated fetus of more than 3 months age as organogenes was complete.
—No active bleeder was found.
— Ovary—right—normal size, a few flimsy adhesions to Pouch of Douglas.
left—normal size—showed omental adhesions.
— Left salpingectomy was performed leaving about 4 cm of tube intact.
— Round ligaments were plicated.
— Peritoneal lavage given.
— 200 ml of haemaceel instilled into peritoneal cavity.
— Abdomen closed in layers.
Post-operative period was uneventful.
Patient was advised to follow-up in O.P.D. after 15 days for further management.

Case 2: Secondary abdominal—broad ligament pregnancy

Mrs. R., a 27 year old Hindu female came to our Gynaec. O.P.D. at Nowrosjee Wadia Maternity Hospital on 25-8-1982 with complaint of primary sterility of 10 years duration.

Menstrual History

Her last menstrual period was on 2-8-1982.

Her present menstrual cycles are irregular (25-35 days) with moderate flow and are painless.

Past menstrual history: Her last regular period was 1 year ago after which she had 6 months amenorrhoea followed by irregular cycles. During this period of amenorrhoea she had consulted private consultant and diagnosis of right-sided tubo-ovarian mass was made, for which 15 days of antibiotic course was given.

Obstetric history—nil.

Past History—No history of any major illness in past.

On Examination—General condition fair, temperature afebrile, Pulse—82/min. Blood pressure 120/80 mm Hg. No pallor, no lymphadenopathy. Systems—N.A.D.

Per abdomen examination—No abnormality detected.

Per vaginum

Per speculum—N.A.D.
Cervix—downward and forward.
Uterus—Retroverted retroflexed with restricted mobility.
Fornices—Right fornix—A smooth, non-variegated soft mass was felt of dimensions of about 8 x 6 x 6 cm with restricted mobiliy. Left fornix—clear.

Per rectal examination—Findings of per vaginum examination confirmed.

Provisional diagnosis—Right-sided tubo-ovarian mass.

Investigations

Hb. 11.0 gms%
BUN—7.17 mg%
WBC—total 4,500/cmm
Blood group—0 +ve
V.D.R.L.—negative
Diff. N.57%, E.3%, L.40%

ESR—38 mm at the end of 1 hour
Blood sugar—Fasting 100 mg%
PPBS—122 mg%
X-ray chest—no abnormality detected

X-ray abdomen—A soft tissue shadow of size 8 x 8 cm seen on right side.

Ultrasonography—right-sided homogenous mass of dimension 10 x 8 x 8 cms

Husband's semen—86 million with 50% motility.

In view of primary infertility with pelvic mass, patient was posted for dilatation-curettage and laparoscopy on 27-8-1982.

Laparoscopy findings

Uterus—normal size
Plenty of omental and bowel adhesions on posterior surface.

Tubes—Left—endomatous with a few flimsy adhesions to bowel.
Right—Tubo-ovarian mass was seen. Plenty of bowel-omental adhesions
Ovaries—Left—normal
Right—could not be visualised
Pouch—no dye spill
Intravasation of dye on right side

Histopathological report of endometrium showed it to be under progesterone effect.

Exploratory laparotomy was performed on 31-8-1982 for adhesiolysis with removal of the tubo-ovarian mass.

Exploratory laparotomy findings

Uterus—Plenty of omental and small bowel adhesions on posterior surface of uterus.
Tubes—Left—edematous, fimbrial end showed phimosis.
Right—plenty of adhesions—could not be differentiated from the tumour mass which was about 3 cm lateral to the cornual end of tube.
Ovary—both ovaries found to be normal.

Operation Note

The adhesions from posterior surface of uterus were separated.

Adhesions from the tumor were also separated. On clearing off the adhesions, the tumor was seen to be arising from the inferior surface of isthmic portion of tube and going down into the two leaves of broad ligament, covered by a thin fibrous capsule. Ampullary and fimbrial regions of the tube were densely adherent to the tumor and could not be separated.

On further dissection, the tumor capsule got accidentally ruptured and a macerated fetal limb protruded out—diagnosis of secondary abdominal pregnancy was made.

Right salpingectomy with removal of the ectopic tumour mass was performed.

Cut end of tube was burried with round ligament by Coffee's technique.
Left round ligament was plicated.
Peritoneal lavage given.
200 ml of Haemaceel instilled in peritoneal cavity.
Abdomen closed in layers.
Post-operative period uneventful.
Patient was advised follow up after 15 days in O.P.D.

Discussion

Diagnosis of ectopic pregnancy requires high level of clinical acumen with high index of suspicion. Both the above mentioned patients

had history of certain duration of amenorrhoea before the onset of irregular menstrual cycles.

Laparoscopy though helped in diagnosing first case, could not detect the ectopic pregnancy in second case due to encapsulation of fetus.

Ultrasonography was also not of much help as it requires expertise to diagnose ectopic pregnancy.

Final diagnosis was reached only after exploratory laparotomy thus eluding clinicians till the end.

Acknowledgement

We take this opportunity to thank the Dean, N. W. Maternity Hospital, Bombay 400'012, for permitting us to report the hospital data.

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COMPARATIVE STUDY OF INTERVAL LAPAROSCOPIC STERILISATION, M.T.P. WITH LAPAROSCOPIC STERILISATION AND VAGINAL STERILISATION

by

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In recent years, various procedures have been proposed for effecting the sterilization of women. Many of these techniques have been less than ideal becaus of associated complications. Sterilisation would be an effective method in fertility management if it were safe and available to all.

In the past several years, the technique of female sterilisation has varied from vaginal sterilization with its associated complications to the use of endoscopes through which the tubes are occluded with bands which limits tubal damage to a small segment which is included within it and hence the possibility of reversing the procedure is increased.

Laparoscopic sterilisation is a relatively safe and effective procedure. It has gained immense popularity in recent years as it combines the advantages of being an outpatient procedure that can safely be performed under local anaesthesia. Freeing the patient from the need to return for removal of sutures has also played a part in its ready acceptance by the people.

This is a study of 500 cases of tubal sterilizations carried out at the Nowrosjee Wadia Maternity Hospital. Of these cases, 400 underwent Laparoscopic sterilization as an O.P.D. procedure and 100 cases had Vaginal sterilization. Of the 400 cases of Laparoscopic sterilization, 50% of them had a combined M.T.P. with sterilization on an O.P.D. basis.

TABLE I
Type of cases

	O.P.D.	Indoor
	No. of cases	No. of cases
M.T.P. with Lap. sterilization	200	—
Interval Sterilization	200	—
Vaginal sterilization	—	100

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TABLE II
Age

Age (years)	MTP with Lap. sterilization	Interval Lap. Sterilization	Vag. Sterilization
21 - 25	19%	18%	20%
26 - 30	49%	47%	44%
31 - 35	21%	26%	30%
36 - 40	11%	9%	6%

66% of the patients were 30 years or less in age showing the high reproduction at an early age.

TABLE III
Parity

Live Births	MTP with Lap. sterilization	Interval Lap. sterilization	Vag. Steerilization
2	23%	23%	21%
3	46%	44%	42%
4	20%	22%	25%
5	8%	8%	6%
6	3%	2%	2%
7	—	1%	4%

In our study nearly 66% of the cases had 3 or less children showing the fact that the idea of a limited and small family is being accepted by the patients when offered a simple and outpatient procedure for sterilization.

TABLE IV
Weeks of gestation

Weeks	Cases	%
6 weeks	72	36
8 weeks	106	53
10 weeks	22	11

From this table it is seen that 89% of the cases came for M.T.P. with sterilization by 8 weeks of pregnancy showing the awareness of the population for early termnation and a permanent method to restrict family size.

TABLE V
Anaesthesia

	L.A.	S.A.	G.A.
M.T.P. with Lap. sterilizaton	100%	—	—
Interval Lap. sterilization	100%	—	—
Vaginal sterilization	—	94%	6%

From this Table it is seen that Laparoscopic sterilization is very safe and can easily be done under local anaesthesia and sedation. Vaginal Sterilization in 94% of the cases required spinal anaesthesia with its associated risks and general anaesthesia in 6%. Hence by doing Laparoscopic sterilization under local anaesthesia the anaesthetic risks are done away with.

TABLE VI

Difficulties at surgery during laparoscopy

Difficulty	Cases	%
BAND dropped in abdomen	6	1.5
Extravasation of air	4	1
Uterus perforated with manipulator	4	1
Omental adhesion	2	0.5
Protrusion of omentun in the wound	4	1
FOLLOW UP COMPLICATIONS		
Local wound sepsis	14	3.5

Difficulties at the time of surgery were encountered in 5% of the cases of Laparoscopic sterilizations. Extravasation of air was seen in 4 cases. There were omental adhesion in 2 cases which had to be separated. Protrusion of the omentum in the wound while withdrawing the cannula occurred in 4 cases. None of these were of any consequence, nor did it prolong the post operative stay of the patients. There was no difference in the complication rate when Laproscopic sterilization was done with or without M.T.P.

The patients were followed up after 7-21 days. The only complication noted in all cases of Laproscopic sterilization was local wound sepsis in 14 cases or 3.5%. Hence when M.T.P. is combined with Lap. Sterilization we have found no complication of any consequence.

TABLE VIII

Follow up complications (vag. sterilization)

Vaginal Bleeding	6%
Fever requiring antibiotics	7%
Dyspareunia	3%
T.O. Masses	20%

This Table clearly shows the high rate of complications (18%) in our series during vaginal sterilization. Hence vaginal sterilization, if ever it is advocated, should only be performed by doctors who are trained in this method. Vaginal sterilization with M.T.P. and interval vaginal sterilization both carried the same risks as far as complications were concerned in our study.

Conclusion

Laparoscopic sterilization by offering the great advantages both to the patients and the Hospial by minimizing the stay of the patients to

a few hours pre and post operatively, has begun to play an important role in the Family Planning Programme.

Laparoscopic sterilization even when combined with M.T.P. has fewer complications as compared to Vaginal sterilisation and hence can safely be used in large camps to restrict the rising population.

What is required today is training programmes to teach the Doctors the use of the Laparoscope and to encourage them to go back to their areas and to teach others to handle the Laparoscope.

ECLAMPSIA

(Twenty Years Review)

by

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Introduction

'It might be said that the incidence of eclampsia is an index of civilization of people, if by civilization we infer education and antenatal supervision',—said Prof. Green Armytage in 1928. Many years have passed since then still eclampsia remains one of the major factors responsible for maternal and perinatal morbidity and mortality in India.

The present study reviews 456 cases of eclampsia and also reviews changing trends in eclampia over a period of twenty years at a teaching institute in Bombay.

Observations and Discussion

Over a period of twenty years from 1961 to 1980, 1,68,675 patients delivered at N. Wadia Maternity Hospital, Bombay. Over the same period there were 456 cases of eclampsia, giving an incidence of 0.28%. These cases have been reviewed in the present study.

Table I shows incidence of eclampsia as reported by various authors.

TABLE I

Incidence of eclampsia

Author	Year	Incidence (%)
Krishna Menon M.K.	1961	1.2
Agarwal S. and Dhall K.	1969-1978	0.58
Konar M. and Das R.	1973-1974	1.1
Yadav S. and P. Nirupama Nayak	1980	0.9
Present series (N. Wadia Hospital)	1961.-1980	0.28

As shown in Table II, only a slight reduction in incidence of eclampsia is observed after 1970.

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TABLE II

Year	Incidence of Eclampsia
1961-1965	0.32%
1966-1970	0.34%
1971-1975	0.2 %
1976-1980	0.2 %

Out of 456 cases, 311 (68.2%) were emergency cases, whereas 145 (31.8%) were booked cases.

63.4% of patients were primigravidae whereas 36.6% were multigravidae.

70.2% of patients were more than 36 weeks pregnant.

Table III shows the type of eclampsia these patients had.

TABLE III

Type of Eclampsia	No.	%
Antepartum	167	36.6
Intrapartum	204	44.8
Postpartum	85	18.6

Management of eclamptic patients

The management of eclamptic patient was carried out on war footing. These patients were managed in a specially equipped eclampsia room, where a trained nurse and a resident doctor used to be present round the clock. They were guided from time to time by senior consultants. The management included medical management and obstetric management. The medical management mainly aimed at the control of the convulsions, sedation, lowering of the blood pressure and preventing complication, while the obstetric management aimed at the safe and prompt delivery.

Table IV shows the mode of delivery in eclamptic patients.

TABLE IV

Mode of delivery	No.	%
Spontaneous vaginal	210	48.0
A.R.M. + Oxytocin	50	11.0
Forceps	174	38.2
Craniotomy	2	0.4
L.S.C.S.	11	2.4

Maternal mortality: Of 456 eclamptic cases 34 died. Thus incidence of maternal mortality was found to be 7.5% in eclamptic cases. Out of

145 registered cases only 4 died giving the maternal mortality rate of 2.8% in booked cases, whereas in unbooked cases it was found to be 9.7% (30 out of 311 died).

Maternal mortality rate was 5.4% in antepartum eclampsia, 8.8% in intrapartum eclampsia and 8.2% in postpartum eclampsia.

Table V shows trend of maternal mortality in eclampsia over a period of last 20 years.

TABLE V

Year	Maternal mortality
1961-1965	5.9
1966-1970	9.1
1971-1975	11.0
1976-1980	4.7

Table VI compares maternal mortality reported by various authors.

TABLE VI

Incidence of maternal death

	Author	Year	Maternal death %
1	Krishna Menon M. K.	1961	2.2
2	Konar M. and Das R.	1975	7.6
3	Kawathekar P.	1976	3.3
4	Singh and Mishra	1977	2.1
5	Dutt and Biswas	1978	17.5
6	Ghose N. and Das B.	1980	4.7
7	Yadav S. and Nayak P.	1980	7.4
8	Present Series	1961-1980	7.5
		1975-1980	4.7

Perinatal deaths: Totally there were 130 perinatal deaths giving Perinatal mortality rate 28.3% in eclamptic cases. Amongst registered cases perinatal mortality rate was 17.9%, whereas amongst unregistered cases it was 33.4%. Perinatal mortality has shown a downward trend over last 20 years as shown in Table VII.

TABLE VII

Perinatal mortality rate in eclampsia

Year	Perinatal mortality %
1961-1965	30.1
1966-1970	29.1
1971-1975	32.0
1976-1980	22.1

Table VIII compares perinatal mortality reported by various authors.

TABLE VIII

Author	Year	Perinatal mortality in eclampsia %
Krishna Menon M. K.	1961	32.0
Pritchand and Stone	1967	10.0
Konar M. and Das R.	1975	77.7
Kawathekar	1976	16.6
Singh and Mishra	1977	14.0
Dutt and Biswas	1978	37.2
Yadav S. and P. Nayak	1980	34.0
Ghose and Das B.	1980	36.2
Present series	—	28.3

Summary and Conclusion

Over a period of 20 years from 1961-1980 456 cases of eclampsia were treated at N. Wadia Hospital.

— Incidence of eclampsia was found to be 0.28%.
— 68.2% of cases were unregistered.
— 63.4% of the patients were primigravidae.
— 70.0% were beyond 36 weeks gestation.
— Maternal mortality rate was found to be 7.5% and Perinatal mortality rate was found to be 28.3% in cases of eclampsia.
— Maternal and perinatal mortalities were very low in booked cases as compared to unbooked cases. The incidence of eclampsia, maternal and perinatal mortality have shown reduction over last 5 years.

Proper antenatal care and control of pre-eclampsia would play great role in preventing such a serious condition like eclampsia.

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MIGRATION OF PLACENTA AS DEMONSTRATED BY ULTRASONOGRAPHY

by

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Introduction

Ultrasonography has become the preferred technique for the localization of the placenta as it is rapid and accurate apart from being safe and simple in imaging the uterus and its contents. It allows visualization of the size, shape and location of the placenta. It also visualizes the uterine cervix, permitting a rather precise determination of the degree of separation of the placental edge and the internal cervical os. The use of ultrasonography in the diagnosis of placenta previa over the past many years has led to the observation, on serial examinations, of the occurrence of placental migration. This phenomenon consists of a progressively increasing separation, in some cases, of the lower placental margin and the internal cervical os during the course of gestation. The occurrence of placental migration necessitates a revision of our current concepts of placental attachment and development of a new hypothesis of dynamic placentation, first propounded by Donald L. King in 1973.

Aim of the Study

This study was carried out with the aim of studying the new hypothesis of placental migration and its clinical implications.

Materials and Methods

During the routine ultrasonography examination of patients who had been referred to the Nowrosjee Wadia Maternity Hospital, from December 1981 to July 1982, for complaints of bleeding per vaginam during the second or early third trimester of pregnancy, 76 patients were diagnosed to have a low-lying placenta. The relationship of the lower placental margin to the internal os was carefully estimated by repetitive scanning. The examination was greatly aided by moderate distension of the bladder.

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Follow-up examinations were done four or more weeks after the initial examination. In some patients three or four examinations were carried out over the last half of gestation. Only 49 patients came for follow-up, out of which 4 patients aborted before repeat ultrasonography examinations.

Results and Analysis

TABLE I
Age

Age (Years)	Cases (49)	Percentage
16-20	3	6.12
21-25	4	8.16
26-30	25	51.02
31-35	17	34.69

Here we find that 85% of the cases in the older age group viz. 26-35 years had low-lying placentae.

TABLE II
Obstetric history

Gravida	Cases (49)	Percentage
1	2	4.08
2	5	10.20
3	9	18.37
4	19	38.78
5 and over	14	28.57

This Table shows that the incidence of placenta previa rose with an increase in gravidity, being highest in the fourth and fifth gravidae.

TABLE III
Initial position of low lying placenta

Initial exam. at gestation in weeks	Position of low lying placenta			
	Ant (%)	Post (%)	Lat (%)	Central (%)
12 and more	10.20	10.20	—	6.12
16 and more	4.80	8.16	—	2.04
20 and more	18.36	6.12	6.12	2.04
24 and more	6.12	—	—	—
28 and more	6.12	4.08	2.04	8.16

This Table shows that about 45% patients had an anterior low lying placenta, whereas 28% had a posterior low lying placenta and 18% had a central placenta extending either anteriorly or posteriorly.

Four patients aborted before coming for repeat examination. The repeat ultrasonography examinations were done anytime between 32 and

36 weeks of gestation. The position of the placenta at these repeat examinations are shown below.

TABLE IV

Position of placenta at repeat examination

Weeks of Gestation	Position of Placenta				
	Ant (%)	Post (%)	Lat (%)	Central (%)	Low lying%
32	4.4	8.8	2.2	4.4	—
34	24.4	8.8	2.2	—	2.2
36	8.8	11.1	2.2	4.4	15.5

It is evident from the above Table that most of the placentae had migrated by 32-34 weeks whereas 9% remained as central placenta previa and 18% were found to be low lying.

TABLE V

Migration of placenta

Migration	Cases (45)	Percentage
Anteriorly	23	51.11
Posteriorly	16	35.55
Laterally	3	6.66
No migration	3	6.66

It can be seen that 51% of the patients showed anterior migration of the anterior low lying placenta, whereas 36% showed posterior migration of the posterior low lying placenta. However there were three patients who showed no migration of the placenta.

Discussion

The ultrasonographic evidence presented in this paper indicates that the placenta can migrate within the uterus away from an internal landmark, the cervix, during the course of gestation. The apparent placenta previa in mid-trimester may convert to a normal implantation by term. It appears to be reasonably clear that this migration is due to uterine growth. Enlargement of the uterus to accommodate the growing fetus occurs in a number of ways. The uterine muscle fibres elongate and hypertrophy. The isthmus of the cervix triples its length and is incorporated into the lower uterine segment during the second trimester. During later third trimester the lower segment further elongates with effacement of the cervix. These changes produce a comparatively rapid enlargement of the uterus in a direction away from the internal os. They have the effect of carrying the margin of the initially low lying placenta away from the internal os towards the fundus of the uterus.

The concept of dynamic placentation may explain not only placental migration but also may help to account for some cases of vaginal bleeding during pregnancy. It may be that the bleeding results from a temporary failure of the placentation process to re-establish attachment

of a small portion of the placenta to the uterine wall. Failure of the process on a larger scale may cause some abortions and may be the mechanism by which abruptio placenta develops.

The clinical implication of placental migration is that the demonstrtion of placenta previa before late second trimester is an indication for re-examination near term and not necessarily an indication for caesarean section.

We thank the Dean of the Nowrosjee Wadia Maternity Hospital for allowing us to present the hospital data.

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MATERNAL FACTORS INFLUENCING LOW BIRTH WEIGHT BABIES

by

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Low Birth Weight (LBW) babies pose a serious challange in the maternal and child health care. It is a major cause of perinatal and infant mortality and morbidity. Its incidence ranges from 2-3% in advanced countries to as high as 25-30% in the developing world.[1]

Material and Methods

Two hundred new borns weighing less than 2000 gms. comprised the case material. Besides the mother's medical and obstetric history, per capita income, living condition, maternal age, weight, height and habits were evaluated. The gestational age of the neonate was determined by physical characteristic and neurological examination.

Observation and Discussion

TABLE I
Sex and gestational age

Sex	No.	%	Preterm	%	IUGR (%)
Male	106	(53)	83	(78.3)	23 (21.7)
Female	94	(47)	67	(73.4)	27 (26.7)

There were 106 males and 94 females with a preponderence of preterm (< 37 wks.) to term (> 37 wks. intrauterine growth retardation IUGR) babies in both the sex groups the ratio being 3-1. (Table I). Buttler and Bonham[2] and Basavarajappa et al[3] have reported a high incidence of LBW in females. Dawkins[4] has explained this finding on the basis of a slower intrauterine growth of female fetuses. Contrary to the above, there were more males (53%) than females (47%) in our series. This preponderance of LBW males could be a reflection of our national demagraphic pattern and the negligent attitude of our society towards female survival.

Butler and Alberman[5] observed more male births before 37 wks. The reason for this is not known. We also noted a higher incidence of prematurity in males (Table I).

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TABLE II

Weight and gestational age

Weight gms.	Group (%)	
1200	I 38 (19)	(All gestational ages)
	<37 wks.	>37 wks.
1200-1500	II 60 (30)	III 12 (6)
1500-2000	IV 55 (27.5)	V 37 (17.5)

By lowering the weight range we modified the classification of LBW babies used by Yerushalamy.[6] The bulk of our cases were preterm and belonged to the groups I, II and IV (153 out of 200 (Table II).

Some of the infants were products of twin delivery hence the number of mothers in the study was only 188.

The universal notion that average Birth weight falls and the rate of prematurity rises with decrease in income[1, 4, 7, 8, 9] was also noted by us.

The difference in the mean birth weight (MBW) of the offsprings of the rich and poor is reported to average 25 gms.[10, 11] Even though all our mothers hailed from a poor socioeconomic class, a fall of 85 gms. in MBW was seen in the poorest group (Table III). The proportion of preterm infants was also more amongst the very poor which is in concurrance with the observation of above workers.

Most factors known to affect the birth weight adversly are interlinked with poverty viz. over crowding, maternal malnutrition, early marriage, illiteracy, ignorance, large families and maternal employment. Some of the above factors were evaluated.

Living conditions were judged by the number of persons living in a room and was correlated with L.B.W. as depicted in Table III. As reported by Crosse,[7] we also found its incidence to be higher in our crowded houses being 63.3% as against 9.6% when only two people occupied a room.

TABLE III

Overcrowding and LBW

No. per room	No. of Mothers	(%)	37 wks.	(%)	>37 wks.	(%)
2	18	(9.6)	11	(57.9)	8	(42.1)
3-4	51	(27.1)	44	(81.5)	10	(18.5)
5 or more	119	(63.3)	95	(74)	32	(26)
Total	188		150		50	

Mothers with larger families (crowded houses) tended to produce premature infants more often (74 and 81.5%). Contrary to common belief we noted low figures of only 57.9% prematurity amongs primigravida (i.e. in families with only two members). It can be concluded therefore, that overcrowding has more influence on prematurity than parity.

Fifteenth percentile of I.C.M.R. charts for height and weight were used to evaluate the effect of maternal nutrition on L.B.W. We noted (Table IV) that mothers with weight more than 50th percentile not only had a lower incidence of prematurity but also produced babies with heavier M.B.W. The height of the mother did not appear to affect the outcome. Combining both height and weight it can be said that though both may have some effect, the latter has more influence on the birth weight of the newborn.

TABLE IV

Maternal height-weight vs. LBW

	No. of Mothers	(%)	<37 wks.	(%)	>37 wks	(%)
Height						
50th Percentile	151	(80.3)	120	(79.5)	42	(20.5)
50th Percentile	37	(19.7)	30	(81)	8	(19)
Weight						
50th Percentile	143	(76.6)	111	(76.9)	32	(23.1)
50th Percentile	45	(23.4)	30	(66)	15	(34)

Problems of primiparity and illgitimacy which are common in young mothers are known to result in a larger proportion of LBW.[8, 12] Contrary to this we as well as Parmalee[13] and Scott[12] were not able to obtain any correlation between maternal age and prematurity or LBW. However, considering the birth order we observed that the incidence of prematurity was highest amongst the first born and dropped from 84.2 to 68.4% with rise in parity. In the grand multipara again the number of premature increased. Additional physical, mental and financial strain to the mother after each baby probably are responsible for this increase in the multipara. The MBW followed the same pattern.

Poor antenatal care has been implicated in causing LBW.[7, 12, 13] Less than 4 visits are considered inadequate.[12] Of the 188 mothers 114 (60.6%) did not attend antenatal clinics at all. These mothers delivered 82.4% of the babies prematurely. As the number of visits increased to more than 3, in 31 mothers, the prematurity decreased to 54.9%. The MBW also showed a steady rise with increased care. It can be surmised that women failing to attend antenatal clinics are more likely to be careless in their dietary habits, hygiene and in health in general. Unfortunately a large proportion of the poor in India belong to this category.

There was only one unmarried mother in our study, three who consumed tobacco with pan, and another who used it as masheri tooth powder. These numbers were too small to evaluate the influence of these factors.

Pre-eclampsia, antepartum haemorrhage and threatened abortion are some of the major antenatal problems which are reported to increase the incidence of prematurity.[4, 7, 18, 19, 20] Fifty three mothers had obstetric problems during this pregnancy, nineteen of these had complications in their previous pregnancy too. Another 53 mothers had problems only n their previous pregnancy. The occurrance of obstetric complication in the present or previous pregnancy did not affect the incidence of prematurity or MBW (Table V). It can be seen from Table I and V that the proportion of preterm babiess was not influenced by the obstetric problems.

TABLE V

Obstetric complications and LBW

Complication in	No. of mothers	(%)	Gestational age <37 wks.	(%)	>37 wks.	(%)
Present + past preg.	19	(10)	14	(73.7)	5	(26.3)
Present only	34	(18)	23	(67.6)	11	(32.4)
Past only	53	(28.2)	45	(73.8)	16	(26.2)

Lubchenco[14] and others[15, 16] have made similar observation, while Crosse,[7] Donald[17] and others[1, 11] have found LBW to be more likely with history of miscarriages, even therapeutic.

Summray and Conclusion

Two hundred low birth weight babies were studied. Factors affecting 188 mothers of these LBW babies were evaluated. The factors which significantly affected the outcome are poor socio-economic state, parity, improper antenatal care and over crowding. Chances of getting a premature baby was high in this group.

Some factors which did not appear to have any effect were maternal age and obstetric problems, past or present. Analysing the effects of maternal undernutrition, it was observed that maternal weight appeared to influence the outcome but not the maternal height.

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THE POSTDATED NEONATE

by

Uday J. Thanawala*
S. N. Daftary**
and
D. N. Patel***

Introduction

Volumes have been written about the premature and the term infant, but what about the babies born out of a post-dated pregnancy? Postdatism, complicates 5-10% of all pregnancies and is associated with increased perinatal risks due to hypoxia and mechanical dystocia. Does the unfavourable in-utero environment of the post-dated pregnancy affect the newborn in the neonatal period, or does the neonate behave like any other healthy neonate.

Material and Methods

Total Number of cases	250
Control group (39-41 weeks)	125
Study group (41.1-43 weeks)	125

In the present study 125 antenatal patients who delivered between 39 and 41 weeks of gestation, were compared with 125 patients, wherein the pregnancy had continued beyond 41 weeks. Certain clinical parameters of antenatal examination and intrapartum management were compared, and then our attention was largely focussed in comparing the behaviour of the newborn babies in the early neonatal period; a time when the obstetrician is largely involved in the care of the newborn.

Results and Ananlysis

Antenatal Characteristics:

Antenatal remarks	Study Group		Control Group	
	Cases	Per cent	Cases	Per cent
(1) Drop in fundal height	28	22.4	12	9.6
(2) Drop in maternal weight	40	32.0	18	14.4
(3) Toxemia	6	4.8	5	4.0
(4) IUGR	7	5.6	5	4.0
(5) Diabetes	3	2.4	2	1.6
(6) Hydramnios	1	0.8	0	0
(7) Abnormal foetal lie	2	1.6	4	3.2
(8) Antepartum haemorrhage	1	0.8	2	1.6
(9) Cinical CPD	7	5.6	4	3.2

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On comparing the antenatal records, the points worth noting are that the drop in fundal height was 2.5 times more common in the study group; and a drop in maternal weight twice as common, than in the control group. The incidence of toxemia, IUGR, diabetes and CPD was marginally high in the study group.

Mode of Delivery

	Control Group (Before 41 weeks) Per cent		Study Group (After 41 weeks) Per cent	
(1) Spontaneous vaginal delivery		77.3		70.8
(2) Forceps		10.3		11.6
—Low midcavity	4.1		8.4	
—Outlet	6.2		3.2	
(3) L.S.C.S.		12.4		17.6

Comparing the mode of delivery, it was observed that the caesarean section rate was approximately one and a half times higher in the study group, whereas the incidence of forceps delivery was only marginally increased. A detailed analysis, however, showed that the incidence of midcavity forceps was twice as high and an easy outlet half as common in the study group.

The higher incidence of operative interference is often due to relatively longer duration of labours, increased incidence of fetal hypoxia and greater degree of mechanical dystocia, because of the higher average birth weights of the post-dated babies.

Induction of labour was far more frequent with the occurrence of postdatism. In the present series, when induction of labour was required, medical induction was resorted to in 72% of the patients, 28% were induced with amniotomy alone, and in 22% the cervix was ripened with an oxytocin drip. Labour was accelerated in 35% with the help of oxytocin.

The neonate was observed and its behaviour evaluated on the following parameters:

Apgar Score

Apgar score	0-3	4-5	6-8	9-10
Control group	0%	4.0%	14.0%	82.0%
Study group	0.8%	6.2%	21.4%	71.6%

The status of fetal oxygenation at birth was assessed on the basis of apgar scores. A poor apgar score indicates a compromised infant requiring neonatal attention.

In the present series on comparing the apgar scores in the two groups it was seen that, whereas 96% of the babies in the control group had an apgar of 6 and above, 92% of the babies in the study group had a satisfactory apgar. Apgar scores of less than five were seen twice as often in conjunction with postdatism. Close observation and monitoring during labour and timely obstetrical interference in the interest of the baby, drastically reduces the number of infants in the poor Apgar score group. However, postdatism is a factor known to contribute to hypoxia --our own study substantiates this.

In centres where facilities for studies of amniocentesis, serial sonography, and EFHR monitoring are available, it is possible to identify the group of patients among the postdated, who are at particular risk of fetal hypoxia, and subject them to intensive management.

Birth Weight

Days	1	2	3	4	5	6
Control group	3.06	2.99	2.96	3.00	3.06	3.11
Study group	3.18	3.15	3.07	3.11	3.13	3.18

The average birth weights (in kg) in the two groups serially observed from day 1 to day 6 are shown in the table. It will be seen that the post-dated babies weigh somewhat more than the term infants. In both the groups maximum weight loss was observed on day 3 and it was marginally higher in the post-dated group. It is also seen that the sixth day, whereas the term infant has gained weight over its birth weight, the post-dated baby has just about regained its birth weight.

Neonatal Jaundice

Days	2	3	4	5	6
Control group	18.2%	40.0%	34.5%	25.5%	10.9%
Study group	11.3%	28.5%	24.4%	16.26%	13.0%

In our study, contrary to our expectations, we found the incidence of neonatal jaundice did not differ significantly in the post-dated infants as compared to term infants.

One would expect that the effects of a more prolonged labour, the more frequent use of oxytocin and increased incidence of obstetrical interference, would reflect with an increased incidence of neonatal jaundice. But in practice this was not observed.

Breast Feeding

Days	3	4	5	6
Control group	21.8%	49.1%	61.8%	89.1%
Study group	8.13%	27.64%	38.2%	53.65%

Successful lactation was established in 89% of the patients delivering at term, by the sixth postnatal day, as compared to only 53% of the post-dated patients.

It is possible that a hormonal disturbance in the internal milieu is the cause of a pregnancy being prolonged beyond term. Since the establishment of lactation is also dependent on a proper hormonal balance the two factors i.e. onset of labour and establishment of lactation seem interrelated, and both are disturbed in a post-dated patient.

Conclusion

Postdatism by itself is not of sinister significance. However it needs investigation to identify the infants at risk due to placental insufficiency. EFHR monitoring, amniocentesis, amnioscopy, ultrasonography are all aids to identify a fetus at risk. During labour fetal heart rate monitoring and scalp vein sampling, whenever possible would help to diagnose fetal distress. Furthermore a close watch for problems of mechanical dystocia and avoidance of a difficult traumatic vaginal delivery, would lead to the birth of a healthy baby which is not compromised at birth.

In the neonatal period, due attention to daily intake to avoid undue weight loss and preparation of mothers for lactation, coupled with top feeds as and when required, will minimise the neonatal problems, in infants born beyond term.

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BALANCE SHEET
As at 31st December, 1980

THE ASSOCIATION OF MEDICAL WOMEN IN INDIA
BALANCE SHEET AS AT 31ST DECEMBER, 1980

FUNDS AND LIABILITIES	Rs.	Rs.	PROPERTY AND ASSETS	Rs.	Rs.
CAPITAL FUND:			**FURNITURE:**		
Balance as per last Balance Sheet	5,400.98		Balance as per last Balance Sheet:		
Add: Transferred during the year	63.00		Furniture	150.00	
		5,463.98	Office Partition	2,750.00	
CONFERENCE FUND:					2,900.00
Balance as per last Balance Sheet	1,263.49		**CAPITAL FUND INVESTMENT:**		
Add: Transferred during the year	124.00		Balance with National & Grindlays Bank Ltd.	1,326.12	
		1,387.49	Fixed Deposit with Central Bank of India	2,500.00	
GOLDEN JUBILEE FUND:					3,826.12
Balance as per last Balance Sheet	24,083.66		**CONFERENCE FUND INVESTMENT:**		
Add: Transferred during the year	1,500.00		Balance with National & Grindlays Bank Ltd.		2,980.49
	25,583.66				
Less: Scholarships Paid during the year	2,400.00		**GOLDEN JUBILEE FUND INVESTMENT**		
		23,183.66	Fixed Deposit with Central Bank of India		15,000.00
DIAMOND JUBILEE FUND:					
Balance as per last Balance Sheet		10,000.00	**DIAMOND JUBILEE FUND INVESTMENT:**		
BUILDING FUND: (Bombay Branch)			Fixed Deposit with Central Bank of India		10,000.00
Balance as per last Balance Sheet		6,505.00			
LIFE MEMBERSHIP:			**CASH AND BANK BALANCES:**		
Balance as per last Balance Sheet	8,889.00		Fixed Deposit with Central Bank of India	6,500.00	
Add: Transferred during the year	500.00		Current Account with Grindlays		

LIFE MEMBERSHIP:			**CASH AND BANK BALANCES:**		
Balance as per last Balance Sheet	8,889.00		Fixed Deposit with Central Bank of India	6,500.00	
Add: Transferred during the year	500.00		Current Account with Grindlays Bank Ltd.	428.50	
		9,389.00	Savings Bank Account with Central Bank of India	9,195.21	
LIABILITIES FOR EXPENSES		1,585.33	Cash on hand	23.27	
					16,146.98
			INCOME AND EXPENDITURE ACCOUNT:		
			Balance as per last Balance Sheet	255.70	
			Add: Excess of Expenditure over Income for the year	6,405.19	
					6,660.89
	Total	57,514.48		Total	57,514.48

J. M. Desa Souza
Dina N. Patel
MEMBERS GOVERNING COUNCIL

DATE: 4 MAY 1983

For Ratan S. Mama & Co.
Partner.

CHARTERED ACCOUNTANTS