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CORRESPONDENCE

Correspondents are urged to write briefly so that readers may be offered as wide a selection of letters as possible. So many are now being received that the omission of some is inevitable. Letters should be signed personally by all their authors.

Prostaglandin-induced Abortion and Cervical Incompetence

SIR,—While the efficacy and relative safety of the method is increasingly accepted, some prominence has been given in recent months to the occurrence of cervicovaginal fistulae as a consequence of prostaglandin-induced midtrimester abortion. A recent communication by Murray[1] has highlighted another complication affecting the cervix which may result from a midtrimester abortion induced with prostaglandins—cervical incompetence in subsequent pregnancies. In view of this report it seems timely to record data relating to patients who have become pregnant following a previous prostaglandin-induced midtrimester abortion in this unit.

Among 307 patients followed up for 18 months or more after prostaglandin termination, 53 pregnancies have occurred in 46 patients; these include 27 term deliveries (with one stillbirth of unspecified gestation and aetiology), three pregnancies as yet undelivered, 13 repeat therapeutic abortions, eight spontaneous abortions, and one ectopic pregnancy.

The eight spontaneous abortions are analysed in the table. Of the five spontaneous first-trimester abortions, each has been followed by an uncomplicated full-term delivery. Of the three spontaneous second-trimester abortions, each was an unplanned pregnancy and none has been followed by a further pregnancy. In one of the latter there was clinical evidence suggestive of cervical incompetence, but it may be significant that in this case vaginal aspiration termination of a 14-weeks' gestation preceded the pregnancy terminated by prostaglandins and, further, the prostaglandin induction/abortion interval was unusually short (3¼ hours).

Eight Spontaneous Abortions after Previous Prostaglandin-induced Abortion

Patient	Parity	Gestation at Abortion (weeks)	Prostaglandin Used and Route of Administration	Prostaglandin Induction/Abortion Interval (hours)	Gestation at Spontaneous Abortion (weeks)	Comments
1	0 + 0	18	E_2 E.A.	10	8	Subsequent uncomplicated term pregnancy
2	1 + 0	16	$F_2\alpha$ I.V.	11¼	7	" " "
3	0 + 0	14	E_2 E.A.	10	8	" " "
4	3 + 0	22	$F_2\alpha$ E.A.	22	8	" " "
5	0 + 0	18	E_2 E.A.	18¾	11	Subsequent ectopic pregnancy followed by term pregnancy
6	5 + 0	16	$F_2\alpha$ E.A.	37½	22	—
7	0 + 1*	16	E_2 E.A.	3¼	23	Clinical evidence of cervical incompetence
8	0 + 0	18	$F_2\alpha$ I.A.	27	24	—

*Previous 14-week termination by vaginal aspiration.
E.A. = extra-amniotic. I.A. = intra-amniotic. I.V. = intravenous.

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Of the 26 fully documented full-term pregnancies, the mean gestation at the time of spontaneous labour (16 cases) was 40·2 weeks (range 37-42 weeks) and the mean duration of labour in all 26 cases was 9·7 hours (range 2-32 hours). No neonatal complications were encountered.

The implication of Murray's report is that the risk of subsequent cervical incompetence is particularly high following the intra-amniotic administration of prostaglandin $F_2\alpha$. However, the presumption may not be justified, for the intra-amniotic route has been that most widely employed for second-trimester abortion, while $PGF_2\alpha$ has been used more frequently than PGE_2 because it is more readily available.

That there is some risk of subsequent incompetence of the cervix in any midtrimester abortion is accepted, but the risk is proportional to the degree of cervical trauma, and evidence of cervical incompetence occurring probably as a result of first-trimester vaginal termination has been documented.[2] The suggestion made by Murray of routine encirclage in subsequent pregnancy for all patients with a history of previous prostaglandin-induced abortion would, on the evidence at present available, seem unduly radical and not warranted.—I am, etc.,

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1 Murray, J., *Medical Journal of Australia*, 1972, 2, 717.
2 Wright, C. S. W., Campbell, S., and Beasley, V., *Lancet*, 1972, 1, 1278.