Contemporary Themes

Ten-minute abortions

W O GOLDTHORP

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Summary

A service performing very early abortions in a district general hospital uses menstrual aspiration, which enables abortion to be carried out early, easily, safely, and simply. Menstrual aspiration avoids interference with routine gynaecological work and permits an operator to widen his criteria for accepting patients for termination. From September 1975 to April 1977 123 cases were referred and 104 aspirations were performed. Termination of pregnancy failed in only two cases, through inexperience, and infection occurred in only one case. Menstrual aspiration should be performed within 10-18 days of missing a period.

Introduction

The technique, known variously as menstrual aspiration, menstrual regulation, menstrual extraction, interception, and uterine aspiration, has been available for about five years.¹ The varied terminology may cause confusion, but menstrual aspiration is becoming the accepted phrase. The Royal College of General Practitioners and the Royal College of Obstetricians and Gynaecologists in their study on attitudes to pregnancy, which is basically a study on abortion, use menstrual aspiration to denote early abortion, up to 12 days after the missed period. There is, however, little evidence of it becoming an accepted routine procedure in the average NHS gynaecological unit except for certain teaching centres.^{2,3}

My initial reaction to the Abortion Act 1967 was to interpret it strictly and not to regard it as a charter for abortion on demand. Liberal-minded general practitioners had mentioned "lunch-time" abortions, but the thought of an avalanche of requests for operation at an inconvenient time of day was not attractive. Nor were the reported results of day-care surgery for abortions carried out up to 10 or 11 weeks particularly satisfactory. Hull *et al*⁴ in 1974 gave a rate of 5.9% for incomplete evacuation and 5.1% for sepsis, results which have not improved. McCarry's⁵ 1977 figures for day-care abortion showed that 6% needed evacuation of retained products, and 5% needed antibiotics for pelvic pain and pyrexia.

I first saw menstrual aspiration performed to alleviate "extreme anxiety" due to delayed menstruation with no physical sign of pregnancy in a State where the abortion legislation was similar to that in England before the 1967

Abortion Act. Material obtained at aspiration was immediately disposed of as histological examination was not considered necessary. Proponents of population control recommend this technique to circumvent abortion laws in countries where they are still strict. The doubt about whether the woman is pregnant and doubt about the intention of the operator allow it to be used. In several countries where abortion laws remains restrictive, menstrual aspiration is distinguished from abortion and permitted—for example, in Bangladesh, Indonesia, and Fiji.⁶

Timing of menstrual aspiration

Menstrual aspiration is simple and safe provided that the patient is referred shortly after missing a period, as the optimum time for abortion is 10-18 days. Earlier, the patient may still menstruate or there is decidual but the blastocyst is so small it is missed and pregnancy continues. After 18 days the pregnancy is growing quite rapidly, and after 22 days becomes more uncomfortable to deal with—the amount to be removed is copious, and doubt exists about the completeness of the procedure. I do not believe that the procedure can be contemplated with safety after this.

The patient must be seen quickly as a menstrual aspiration may be needed the next day (table I). Fortunately Tameside is a compact, highly populated area. A general practitioner with a patient with delayed menstruation can ring the consultant straight away to arrange a visit to the patient's home. (This has the added advantage of allowing an assessment of the patient's social circumstances.) Such visits can usually be fitted in quite easily either to or from work. It is, of course, difficult to say "no" on the patient's home ground, and there is the danger of menstrual aspiration becoming abortion on request, but at this stage the risks are minute, much less than with vacuum aspiration under general anaesthesia.

TABLE I—No of days overdue before patients were seen and operations performed

No of days:	≤5	6–	11–	16–	21–	26–30
When seen	8	39	40	23	10	3
When performed		16	45	23	15	5

Communications with general practitioners

The main problem was to set up a communication system with general practitioners to arrange rapid and early examination, and for the general practitioner to encourage his patients to attend soon after missing a period. General practitioners and doctors running Family Planning Association clinics in the Tameside area were informed by circular, postgraduate lectures, and personal contact. Most are aware of the availability of this technique. It has, as yet, not caused an avalanche of cases. The technique was introduced in September 1975, and by April 1977, allowing for two months' leave, 123 patients had been referred for consideration and 104 aspirations carried out. A major problem is that the patients do not report early enough or the general practitioner forgets and wastes time arranging a pregnancy test.

Tameside General Hospital, Ashton-under-Lyne, Lancashire OL6 9RW

W O GOLDTHORP, MB, FRCOG, consultant obstetrician and gynaecologist

Patients

Careful history taking is essential, especially about menstrual regularity, sexual activity, timing of intercourse, contraception, possibility of failure, sources of anxiety and tension that may cause amenorrhoea, and why, if pregnant, the patient does not wish it to continue. Mothers and husbands are best out of the way if the full story is to be obtained. This should be followed by a careful inspection of the breasts and speculum and bimanual vaginal examinations. With the history and several of the textbook signs of early pregnancy, one becomes surprisingly accurate in assessing whether the woman is pregnant or not, particularly after examining more and more patients at this stage of pregnancy (table II).

TABLE II—Consultation diagnosis and outcome of operation

	Pregnant	Doubtful	Not pregnant
At consultation	42	48	33
At operation	67	18	19

From September 1975 to April 1977 123 patients were referred and 104 menstrual aspirations were performed (table III). Eighty patients were married, 32 were single, and 11 were widowed or divorced. There were wide ranges in age and parity (tables IV and V). General practitioners referred 116 patients, family planning clinics one, and nursing or other hospital staff six. Domiciliary visits were arranged for 94 patients, 12 were seen in clinics, and 17 in consulting rooms.

TABLE III—Results of interviews with 123 patients, 104 of whom underwent menstrual aspirations

Menstrual aspirations not carried out				Menstrual aspirations carried out			
Menstruated	..	..	12	Tissue diagnosis:	..	..	75
Changed mind	..	..	3	Products of conception	..	..	5
Admitted ? ectopic	..	..	1	Decidua, no chorionic tissue	..	..	4
Failed due to acute retroversion	..	..	1	(2 positive pregnancy tests)	..	..	11
Contraindicated due to associated gynaecological problem	..	..	2	Endometrium. Arias-Stella phenomenon, no chorionic tissue (pregnancy tests negative)	..	..	4
				Secretory endometrium	..	..	11
				Proliferative endometrium	..	..	4
				Mucus and blood	..	..	5

TABLE IV—Age of 123 women requesting menstrual aspiration

Age (years)	<16	16–	21–	26–	31–	36–	>40
No of patients	4	17	26	26	23	14	13

TABLE V—Parity of 123 women requesting menstrual aspiration

No of births	0	1	2	3	4	5	≥6
No of patients	36	14	39	18	12	2	2

Future family planning techniques should be discussed at the interview. We listed 25 of our patients for sterilisation, 13 had an IUCD inserted at the time of the operation, 59 returned to their general practitioner for family planning, three continued with the family planning clinic, and eight husbands had a vasectomy arranged.

Surgeons

So far no other consultant gynaecologist in the region is interested and the service stops when I am away. Tameside has expanded after the ban on extra registrar posts. The varying ability and experience of assistants, mainly senior house officers, have been a drawback, as I have been unhappy about using them to help. I have carried out all preliminary examinations and 66 of the operations. SHOs need careful

supervision of their early cases, and this is time consuming, but most SHOs are from developing countries, where menstrual aspiration is an accepted technique for population control, and they are very eager to learn the procedure. Four SHOs performed 29 operations.

Personal inclination and ability to achieve a good rapport with the patient is important. Even though simple, it is not a procedure to be handed to "any" resident. They must have an aptitude for it. Attempted training of our registrar was a disaster; although he performed nine operations, they resulted in a distressed doctor, distressed patients, and distressed midwives. We almost lost the co-operation of the latter. A sympathetic SHO, however, quickly became most proficient. Complications decline with experience.⁶ A constantly changing population of junior doctors could result in a high complication and failure rate, thereby bringing the procedure into disrepute.

Venue

Suitable facilities and experienced and co-operative nurses are, of course, of paramount importance. The days on which aspirations are performed and their number vary from week to week. A busy operating theatre with fixed sessions is unsuitable, as the operation may be needed the day after seeing the patient. Fortunately we have the use of a large new maternity department, and several of the second-stage rooms are usually empty. Furthermore, our midwifery staff have been very co-operative. They are not pro-abortion, but by not overloading them and by ensuring that frivolous cases are not carried out, their sympathy is maintained. Once the procedure has been worked out, only one nurse is needed to prepare the delivery room and help during the operation, mainly as a runner.

Equipment

The midwifery staff now maintain a trolley containing all the equipment needed: (1) an ARM pack—that is, the pack used routinely for artificial rupture of the membranes, consisting of leggings, lithotomy sheet, swabs, gallipots, etc; (2) Cusco's bivalve speculum; (3) a 20-ml syringe; (4) a pudendal block needle and guide; (5) lignocaine 1% plain 20 ml; (6) one volsellum; (7) one uterine sound; (8) Hagar dilators to size 8; (9) a rocket 50-ml syringe with 5 mm cannula; (10) a spare 5-ml cannula, also sizes 4, 6, and 8 mm; (11) a Gravigard; and (12) 20-cm scissors.

Technique

The usual time for swabbing the vulva to completion is 10 minutes; often less. If the person is agitated, highly nervous, or wishes it 10 mg of diazepam (Valium) may be given slowly, intravenously. Entonox (50% O₂ with 50% N₂O) apparatus must be available. Of the first 50 patients five were given intravenous diazepam (10 mg) and four were given Entonox. After August 1976 diazepam was offered routinely; 36 had only diazepam, two had diazepam and Entonox, while no one had only Entonox.

It is essential to engage the patient in general conversation during the procedure. Explain exactly what you are doing, and why. Patients vary in their attitudes and the degree of discomfort is extremely variable, but without doubt those who are allowed to lie there without reassurance become tense and experience more discomfort.

Having scrubbed and gowned, put the patient into the lithotomy position; swab the vulva, towel the patient, swab out the vagina, and carry out a bimanual examination (talking and explaining all the time). With the bivalve speculum inserted, the cervix located, and the anterior lip of the cervix grasped with the volsellum inject 7-10 ml 1% lignocaine behind the cervix, at the 4 and 8 o'clock positions. Warn the patient that this injection may be uncomfortable and allow two or three minutes for it to take effect. Insert the uterine sound to assess direction; then insert the 5-mm cannula to the fundus and apply vacuum by means of a 50-ml rocket syringe. Move the cannula up and down; if the patient is pregnant products of conception will flow up the cannula—anything from 5 to 30 ml; if she is not only 2 to 3 ml of material is obtained. As the uterus empties, it grips the cannula and the curette openings can be felt to scrape the uterine wall. At this time the patient may experience some lower abdominal discomfort, similar to dysmenorrhoea. Reintroduce the cannula once or twice to ensure that the uterus is empty. It usually is after the first attempt. Although the *Population Report F, No 2*⁷ states that the cannula

should be introduced only once to avoid infection, I believe that infection is more likely to occur in the retained products of an incompletely emptied uterus, and I make sure the uterus is absolutely empty.

The patient should then be given a cup of tea and allowed to rest before going home. Of the 104 patients 90 rested for up to two hours, 12 for two to three hours, and two for six hours.

Histology

The aspirate from every patient is sent for histological examination. If the patient was pregnant the case is then notified to the DHSS as a termination of pregnancy. The referring general practitioner will have already completed the green form, Certificate A, in case the result is positive. If decidua only is reported the general practitioner can be contacted and asked to arrange a Prognosticon test to ensure that the woman is not still pregnant. The possibility of having missed an early tubal pregnancy will also be considered.

Follow-up

Patients are asked to report any untoward symptoms to their general practitioners, arrange to go for a check the week after the operation, and start using an appropriate contraceptive. Follow-up appointments are given at eight to 10 weeks after the operation; fewer than half the women attend. No complication has so far been reported in the clinic. A more complex medicosociological study is at present under way.

Complications

There were no complications in 99 cases. One patient fainted and one had pain two to three hours after the operation. Two patients remained pregnant: one early in my experience and one after an inexperienced and unsupervised SHO had performed the operation. Only one patient became infected. She was three and a half weeks overdue and a Gravigard was inserted. She did not report continued, postoperative blood loss owing to her husband's concurrent serious illness, and subsequent investigation showed chronic myeloid leukaemia.

Otherwise no medical or psychological problems have been reported. The procedure appears satisfactory in many ways. Only two long-term complications remain to be assessed and many more cases are needed for study. These are damage to the internal os with midtrimester abortion and sterility due to blocked tubes. The first is unlikely even in a primigravida, as only the 5-mm cannula is usually used. The second we have an open mind about; the incidence should be no higher than that after ordinary vacuum aspiration, probably less. Despite early sterilisation and insistent contraceptive advice, three patients have so far requested our services again.

Legality

Lee and Paxman⁸ note that the laws of most countries can be basically divided into two models: (a) statutes that expressly require proof of pregnancy as an element of the criminal offence, and (b) statutes that make it a crime to act with the *intent* of interrupting a pregnancy, *whether or not* the woman is pregnant.

The first statute applies to most South American countries and many Moslem ones. Menstrual aspiration appears to have become accepted in most of these. In Britain and most ex-British colonies the second statute applies. It is not whether or not an abortion has been carried out that is criminal, but the *intent* of terminating a pregnancy that is criminal.

As menstrual aspiration is intended to terminate a pregnancy it can be carried out only under the terms of the 1967 Abortion Act. This may cause some logistical problems in getting the Certificate A signed by the referring doctor, but these can usually be overcome. This point was particularly emphasised in clause 10 of the Abortion (Amendment) Bill (which failed to get through Parliament), which stipulated that references in the Abortion Act to termination of pregnancy should include acts with intent to terminate a pregnancy if such existed. Mr Benyon stated on 25 February 1977 that the intention was to ensure that uterine evacuation before pregnancy

could be diagnosed should be carried out only by registered medical practitioners under terms of the 1967 Abortion Act.

Conclusion

Menstrual aspiration is a useful addition in our armoury for dealing with the abortion problem. Early requests may be dealt with easily and quickly, and it avoids wasting valuable ward beds and operating time. Rapid communication between patient and general practitioner and between general practitioner and gynaecologist is important. Both must be educated in how to take advantage of this service. Gynaecologists in other area health authorities may find it advantageous to look into the possibility of providing such a service. The possibility of training a part-time clinical assistant could also be looked into.

I wish to emphasise, however, that I am already fully committed with my obstetric and gynaecological duties within the Tameside Area Health Authority and have no time available to deal with requests for menstrual aspiration referred from outside the Tameside Area.

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ONE HUNDRED YEARS AGO In the Annual Report of the Colney Hatch Lunatic Asylum for 1877, Dr Sheppard makes the following remark with regard to the use of the Turkish bath. "The more I see of the effects of hot air in the treatment of certain forms of insanity, the more am I persuaded that no asylum can lay claim to completeness which is not furnished with this apparatus for eliminating poisons and renewing life." The following case will, I think, serve to confirm that statement, or, at any rate, would seem to indicate some therapeutical value of the Turkish bath in a case of melancholia. The case was one of ordinary melancholia in a man forty-two years of age. The complaint originated about a year previous to taking the baths, and was attributed to a sunstroke in India. The patient had rather an emaciated appearance. The liver and digestive organs were out of order. He was profoundly melancholy and taciturn, and had delusions of a religious kind. During a period of six weeks, the man had twelve Turkish baths—two a week. The after-effects of the baths were as follows. About half an hour after the first bath, the patient fell into a calm sleep which lasted some hours, from which he awoke greatly refreshed, and appeared for a time to show symptoms of becoming more sociable. From the time of first taking the baths, it was unnecessary to give him any sedatives. He had previously been in the habit of taking chloral; but from that time a fair amount of natural sleep was obtained, and no drugs of any kind were administered. He rapidly gained flesh; his appetite improved; there was no longer any difficulty in persuading him to take food; and his liver and digestive organs performed their functions in a natural manner. At the end of the period of his taking Turkish baths, there was certainly a marked improvement in his appearance. From being a thin, weak, depressed-looking man, suffering from dyspeptic symptoms, he became, after about six weeks, decidedly more cheerful, had gained weight, and his delusions seemed to be gradually leaving him. I have since heard that he is making steady progress. The improvement in this case, especially with regard to the effect of the bath in producing natural sleep, seemed to me so encouraging, that I am induced to publish it. (*British Medical Journal*, 1877.)