Women with no pelvic relaxation and well-supported pelvic organs usually do not have stress urinary incontinence and the few exceptions who do, should not undergo a procedure for bladder neck suspension.[3] However, we clearly indicated in the first article[4] that all women in this study had some degree of pelvic relaxation and all of them had positive Q-tip test results of ≥35°. With these criteria, we believe that randomizing patients to the various procedures is the most meaningful way to conduct such a study.

The theory about the superiority of the vaginal procedures that enable the periurethral veins to remain engorged, as opposed to the abdominal procedures, is very interesting, but remains to be proven. In the comment section of our articles we state clearly that there is definitely room for the vaginal procedures for stress urinary incontinence. The surgeon's experience and the patient's general condition are very important factors to consider. However, in comparing the anterior colporrhaphy or Pereyra procedure with the Burch operation, the latter in our hands resulted in better cure rate.

Arieh Bergman, MD, Charles A. Ballard, MD, and Paul P. Koonings, MD

Los Angeles County–University of Southern California Medical Center, Women's Hospital, Room L-1022, 1240 N. Mission Road, Los Angeles, CA 90033

REFERENCES

1. Beck PR, McCormick S. Treatment of urinary stress incontinence with anterior colporrhaphy. Obstet Gynecol 1982;59:269.
2. Leach GE, Yip CM, Donovan BJ. Mechanism of continence after modified bladder neck suspension. Urology 1987;29: 328.
3. Bergman A, Koonings PP, Ballard CA. Negative Q-tip test as a risk factor for failed incontinence surgery in women. J Reprod Med 1989;34:193.
4. Bergman A, Ballard CA, Koonings PP. Comparison of three different surgical procedures for genuine stress incontinence: prospective randomized study. Am J Obstet Gynecol 1989;160:1102.

Tubal embryo successfully transferred in utero

To the Editors: Until fairly recent times, the multifarious aspects of in vitro fertilization, embryo handling, and gamete intrafallopian transfer many would have considered hardly conceivable. In view of all the developments, it is considered timely to report that in the Gifford Memorial Hospital, Randolph, Vermont, in 1980, a 27-year-old patient with unaccountable infertility and regular 28-day cycles had intercourse around the middle of the month. Approximately 4 weeks later severe pain developed in the region of the left fallopian tube. There was no uterine bleeding and the pregnancy test was positive. Her history and all laboratory test results were normal. Abdominopelvic examination revealed no appreciable uterine enlargement or discernible abnormalities, only severe pain elicited with palpation in the tubal area.

Exploration while the patient was under regional anesthesia revealed a single corpus luteum in the left ovary, some uterine congestion, and on direct palpation of the left tube a small, 4 to 5 mm mass. With careful incision into the tubal lumen an intact embryonic sac was easily enucleated, still completely covered with chorionic villi, even at 40 days, as shown in Fig. 1. It was immediately placed in oxygenated saline solution warmed to body temperature. A segment of infusion tubing was cut, one end slanting and the other attachable to a glass Presto syringe with a large rubber bulb enabling one to aspirate or express as desired. With gentle suction the slanted end of the tubing was passed into the myometrium in the upper, anterior aspect of the uterus until discernible decidual tissue was observed. With the tubing in situ, the embryonic sac was taken up into the glass syringe, which was then attached to the tubing and expressed in utero. Tamponade of the puncture site with a very wam pad controlled any bleeding. The tube was then repaired and the abdomen closed. The pregnancy test remained positive. After normal postoperative and prenatal courses, a normal infant was delivered at term.

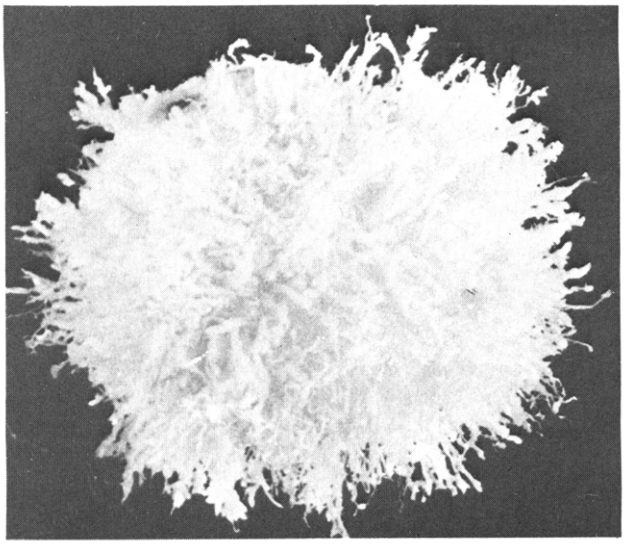

Fig. 1. Human chorionic sac still completely covered with villi at 40 days. (From Rugh R, Shettles LB. From conception to birth: the drama of life's beginnings. New York: Harper & Row, 1971.)

The above was considered the first transfer of a tubal embryo in utero with successful outcome, until recently. Dr. A. P. D. Rosa of São Paulo, Brazil, cites a case he discovered by Dr. C. J. Wallace.[1] The patient underwent a myomectomy and an undiagnosed tubal pregnancy was found. With the myomectomy completed, an "olive size" gestational sac was easily removed and securely placed in utero. After closure of the uterus, the tube, and the abdomen and with uneventful postoperative and prenatal course, a normal infant was delivered at term.

With his case and the one cited, it would appear that with the intact, early embryonic sac still covered with

the full complement of chorionic villi, free of hemorrhage, transfer in utero may prove successful and merits a try, especially in the childless patient.

Landrum B. Shettles, PhD, MD
Womens Hospital, 2025 East Sahara Ave., Las Vegas, NV 89104

REFERENCE

1. Wallace CJ. Transplantations of ectopic pregnancy from fallopian tube in cavity of uterus. Surg Gynecol Obstet 1917;24:578-9.

Use of midforceps applauded

To the Editors: I congratulate Dr. R. A. Bashore on his excellent presentation (A comparison of the morbidity of midforceps and cesarean delivery. AM J OBSTET GYNECOL 1990;162:1428-35.). It is satisfying to see prominent obstetricians doing something to bring clear facts about the advantages of midforceps delivery.

With reference to the 3-hour second stage of labor, I feel better with the classic 2 hours. In special cases of dystocia with good fetal heart tones and epidural anesthesia, the 3 hours are okay. I have seen it longer than that, although contractions every 3 minutes for a longer time bother me because there is no progress and the fetal head receives the trauma.

I am impressed with Dr. Bashore's assessment of future cesarean morbidity. His concerns were: the morbidity associated with repeat cesarean delivery, repeated blood transfusions, and the risk of uterine rupture. To these I would add increased dyspareunia after the age of 50 years and the risk of unusual bleeding when doing a curettage if care is not taken that the curette does not touch the lower anterior cervical segment.

I applaud his guidelines to ensure the prudent use of midforceps. If I were to add my input, I suggest the posterior and transverse position be rotated by the Ramirez technique, which is less traumatic. In dystocia cases, this rotation can be done without anesthesia, the labor is allowed to continue, and later on, if a spontaneous delivery does not occur, you will be doing a forceps delivery at a much lower station and to an anterior position. I suggest that there is a need for a more objective and accurate method to evaluate the presenting part station. The method at present is subjective and inaccurate. On this same point, sometimes I estimate +2, and a few minutes later, I estimate 0 station. We have to be careful with it.

I could not agree more with Dr. Bashore's quest to remove "some of the stigma associated with the use of midforceps without a loss of respect for the procedure."

Jorge O. Escamilla, MD
700 DeSoto Ave., Brooksville, FL 34601

Findings not new

To the Editors: We note with interest the findings of Langer et al. (Langer O, Levy J, Brustman L, Anyaegbunam A, Merkatz R, Divon M. Glycemic control in gestational diabetes mellitis—How tight is tight enough: Small for gestational age versus large for gestational age? AM J OBSTET GYNECOL 1989;161:646-53) who report a correlation between levels of control of maternal glucose and fetal size at birth in mothers diagnosed to have gestational diabetes. They found that when mean maternal blood glucose values are high (>105 mg/dl) there is a significantly increased incidence of large-for-gestational-age infants, whereas in the group with low maternal blood glucose values (mean <86 mg/dl) small-for-gestational-age infants were more likely.

Whereas we are in agreement with the significance of these observations, we write to assert for the benefit of your readers that these findings are not new, and more importantly that hypoglycemia in the whole population of pregnant women (not only those with diabetes) is associated with fetal growth retardation and unfavorable perinatal outcome. Karlsson and Kjellmer reported in 1972[1] of the association between fetal outcome and glycemic control in diabetic mothers, and we have reported regularly from the Mercy Maternity Hospital since the early 1970s of the association between maternal plasma glucose levels and perinatal mortality and morbidity including fetal size and malformations.[2-5]

Our studies were conducted on a pregnant population with oral glucose tolerance routinely tested during the third trimester, not just those patients with criteria that suggested an increased probability of diabetes. Percentile distributions of plasma glucose levels were used to define hypoglycemia and hyperglycemia, and analysis of the obstetric results in 5000 consecutive patients showed that hypoglycemia had a significant association with subnormal estriol excretion, fetal and placental growth retardation, some fetal malformations, and increased perinatal mortality. When there was hyperglycemia placental growth was stimulated, there as an increased incidence of malformations, and perinatal mortality was increased. We found that hyperglycemia of itself was not associated with an increased incidence of large-for-dates infants, although that observation was confirmed in those patients whose glucose tolerance tests showed defined gestational diabetes. We hypothesized that hypoglycemia is a causal factor in fetal growth retardation and death by restriction of basic substrate necessary for normal fetal growth. We proposed that fetal growth retardation in hypoglycemic mothers may be preventable by administering nutrients to mothers either orally or intravenously.[7]

As pleased as we are that researchers continue to publish information that substantiates our earlier findings, we would be grateful that when authors seek to show originality in their research that they would at least acknowledge those publications that first reported the significance of these observations.

David A. Abell, MGO, and Normal A. Beischer, MD
University of Melbourne Department of Obstetrics and Gynaecology, Mercy Maternity Hospital, Clarendon Street, East Melbourne, Victoria, Australia 3002