

LETTERS TO THE EDITOR

New technologies?

To the Editors: I read with interest the article by Edwards and Carson (Edwards J, Carson SA. New technologies permit safe abortion at less than six weeks' gestation and provide timely detection of ectopic gestation. *Am J Obstet Gynecol* 1997;176:1101-6).

Although I agree with most of the article, I do find a couple of flaws in the algorithm depicted on page 1105, which calls for quantitative human chorionic gonadotropin if no gestational sac is found on curettage. Our policy has been in this instance to obtain a vaginal level 1 sonogram right after the suction, and if the sac is still present, we missed the pregnancy, which has been reported in up to 11.1% in gestations of <6 weeks. On the other hand, if the sac is not seen, the termination has been completed and the sac either was missed or disintegrated on suctioning. If still in doubt, we can request urgent pathologic studies for identification of pretrophoblastic endometrium, with special staining technique for cytokeratin and human placental lactogen, which indicates that we were dealing with an intrauterine pregnancy. The Arias-Stella-Sturgis reaction is another option. Although it is not pathognomonic of ectopic pregnancy, it could be of some help. Additional information obtained by microscopic tissue investigation, such as a well-developed decidua bereft of vessels and Nitabuch membrane, is also welcome. The decreasing levels of human chorionic gonadotropin are very important, but the discriminatory zone of 1700 mIU/ml, which is valuable in relation to a sac presence, as a new level, from the original observation of Romero, does not guarantee ectopic pregnancy integrity. We have seen in many instances ruptures of undetected ectopic pregnancies with levels quite below that number. Safety is the foremost preoccupation for the dedicated professionals who deal with termination of pregnancies; a missed or ruptured ectopic pregnancy could be a bothersome situation for many of us who cannot afford to wait for two quantitative determinations of human chorionic gonadotropin, which in some instances could take a lot of precious time.

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Reply

To the Editors: The authors of the letter apparently consider it preferable to wait for the results of a pathologic examination and then wait for the β -human chorionic gonadotropin results. Pathologic study can only indicate that there is an intrauterine pregnancy. Even when there is access to 7-days-a-week pathology examinations with special stains, it would still delay the diagnosis

of ectopic pregnancy by the time it would take to get the patient back in to start the workup.

Although we repeat vaginal ultrasonography postoperatively on all our cases of <6-week gestations, this was irrelevant in the ectopic pregnancies because none of them had a gestational sac visualized on the original ultrasonography. In those gestations in which a sac was visualized by ultrasonography (4- and 5-week gestations) we failed to detect chorionic membrane and villi in only 18 (1.3%) of 1377 cases. Two (0.14%) of these cases were intrauterine pregnancies that we failed to remove. We believe the pathologic examination with special stains and looking for pathologic evidence of an intrauterine pregnancy will cause further delay because, when the evidence of an intrauterine pregnancy is missing, it still must be determined whether there is an ectopic pregnancy. There were 81 cases that had appropriately decreasing levels of β -human chorionic gonadotropin, and even assuming that all of them would have been identified pathologically, we would still have needed to begin the evaluation in the 9 cases that proved to be ectopic. By use of our protocol, five of the unsuspected ectopic pregnancies were receiving treatment by the end of the day on which they came for the abortion. The remaining patients, whose initial β -human chorionic gonadotropin level was below the discriminatory zone, were diagnosed with a high degree of certainty when they returned within 72 hours and were found to have a stable or rising β -human chorionic gonadotropin level.

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Fetal sex and cesarean section

To the Editors: I read with interest the article by Lieberman et al. (Lieberman E, Lang JM, Cohen AP, Frigoletto FD Jr, Acker D, Rao J. The association of fetal sex with the rate of cesarean section. *Am J Obstet Gynecol* 1997;176:667-71).

Years ago I conducted similar studies with regard to fetuses delivered by the abdominal route. The sex ratio of 128 that I found was lower than reported by the authors (137.5) but markedly higher than the prevailing rate in Hungary during the preceding 100 years (104 to 107.9).¹ I found the highest sex ratio among primiparous women (166).

It is interesting that in the material of Lieberman et al. only in the >3500 gm group did the number of males exceed that of females. It is understood that the average birth weight of girls is lower than that of boys. Nonetheless, in my material, even in the <2500 gm group, the sex ratio was still 140. It is surprising, therefore, that in the authors' material there was a female excess only <3500 gm, even if the average birth weight of males exceeded