LETTERS TO THE EDITOR

SIGNS OF ECTOPIC PREGNANCY

To the Editor:

The excellent article describing the presentation of ectopic pregnancy by Andolsek (*Andolsek KM: Ectopic pregnancy: 'Classic' vs common presentation. J Fam Pract 1987; 24:481–85*) alluded to tachycardia in case 2 as a "clue" to this difficult diagnosis. This finding, especially when produced by postural challenge, is an extremely valuable determination in the early detection of ectopic pregnancy.

Ectopic pregnancy is usually found in young women with excellent cardiovascular reserve. By the time the blood pressure is affected by postural changes, significant intraabdominal blood loss has occurred. A more sensitive method is to measure also postural heart rates.

The method I use is, first, to determine heart rate and blood pressure in a patient who is supine for more than three minutes. Then, I sit the patient up and have her dangle her legs (standing is not necessary) and reevaluate the pulse and blood pressure in three minutes. If the pulse increases by 20 or more beats per minute, a significant intravascular volume loss has occurred regardless of changes in blood pressure.

A postural heart rate increase of 20 beats per minute in the setting of a positive pregnancy test is an ectopic gestation until proven otherwise.

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PATIENT SATISFACTION AND CONTINUITY OF CARE

To the Editor:

Cherkin, Hart, and Rosenblatt[1] compared patients of family physicians with patients of general internists and found no differences in general satisfaction and satisfaction with access, humaneness, and technical quality of care. Analyses I performed on this same data set were consistent with those reported by Cherkin et al.[2–6] The consistent finding of no difference between family practice and general internal medicine patients for the dimensions of satisfaction reported by Cherkin et al is in part due to large correlations between the satisfaction measures they analyzed. In a confirmatory factor analysis of these data, I found correlations ranging from 0.74 to 1.00 among latent variables representing the four dimensions of satisfaction they examined.

Cherkin et al did not examine specialty differences for the satisfaction with continuity of care scale (1. This is not the doctor I usually see when I go for medical care. 2. I hardly ever see this doctor when I go for medical care. 3. I see this doctor just about every time I go for medical care. Alpha reliability = 0.89), but they included one of the scale's items as a predictor of satisfaction with the four dimensions of care they examined. When I analyzed these data, I observed specialty differences in satisfaction with continuity of care.

Ordinary least-squares regression was used to examine differences in satisfaction with continuity of care between patients of family physicians, primary care track general internists, general internists, and subspecialty internists, controlling for patient health and sociodemographics, provider expense- or income-sharing arrangements and practice type (solo office-based, single-specialty, multispecialty, salaried academic, other). The most notable effect was a highly significant difference favoring internal medicine subspecialists over general internists ($P <= .0001$). Patients of internal medicine subspecialists also tended to be more satisfied with continuity than patients of family physicians ($P < .10$). In addition, there was some indication of greater satisfaction with continuity among patients of primary care track general internists than among patients of general internists ($P < .10$).

The specialty differences observed for continuity of care may reflect different types of patients seen by providers in these specialties. Internal medicine subspecialists, for example,

may be more likely than general internists to see chronically ill patients, for whom regular visits and continuity of care are typical. An important issue for future research is explaining these specialty differences by examining potential explanatory factors such as patient characteristics (eg, chronic conditions).

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The preceding letter was referred to Dr. Cherkin, who responds as follows:

It should be reassuring to readers that Dr. Hays' separate analyses of the same data set reached the same conclusion: no differences in patient satisfaction with family physicians and general internists for the dimensions of quality, humaneness, access, and general satisfaction. We did not analyze specialty differences for the "satisfaction with continuity of care" variables, since they are measures of continuity and not measures of satisfaction. However, because having a usual physician is known to be correlated with patient satisfaction, it seemed important to include a measure of this as a control variable in the analyses. Finally, we deliberately excluded medical subspecialists from our analyses because we were concerned about comparing the proverbial apples with oranges. Family physicians and general internists provide first-contact care for a broad range of similar problems, while subspecialists often see referred patients, have a much narrower scope of practice, and see a more medically dependent patient population.

In view of these fundamental differences in the types of patients seen by generalists and specialists and in the roles these physicians play for their patients, we did not believe comparisons of patient satisfaction with physician generalists and specialists would be interpretable.

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PAPANICOLAOU SMEAR TECHNIQUES

To the Editor:

We enjoyed reviewing the findings of Reissman,[1] who demonstrated an improved yield of endocervical cells using a Milex spatula followed by a Cytobrush in Papanicolaou smears from women over 45 years of age. This study reported an endocervical recovery rate of 76 percent in women older than 45 years using this technique, compared with less than 30 percent using the Milex spatula followed by a moist saline swab, a technique we previously found to yield a 63 percent endocervical cell recovery rate in postmenopausal women.[2]

We believe that there are three possible explanations for the failure of Reissman to replicate our findings. First, his sample only included 65 women older than 45 years whose Papanicolaou smear samples were collected with the Milex spatula and moist swab. We calculate that the confidence interval is ±11 percent for the 29 percent recovery rate reported. Second, we believe that the Papanicolaou smear techniques were not identical in the two studies. Our protocol included swabbing the cervix of excess mucus with a large cotton swab prior to utilizing the Milex spatula and moistened swab, whereas Reissman does not describe employing this step. We have found that swabbing the cervix of excess mucus prior to performing a Papanicolaou smear improved our endocervical cell recovery rate 4 to 5 percent in postmenopausal women.[3] Finally, the outcome criteria for adequate Papanicolaou smears differed in the two studies. We considered an adequate smear as one containing the presence of endocervical or squamous metaplastic cells, whereas Reissman considered a smear adequate only if it contained endocervical cells.

Since publication of our original findings, we continue to have satisfactory Papanicolaou smear results in older women using the Milex spatula and moistened swab. Between July 1, 1984, and December 31, 1987, 910 Papanicolaou smears were performed in our family medical center on women older than 45 years with an intact uterus. Of the smears, 498 (55 percent) contained endocervical cells, and 537 (59 percent) had endocervical cells or squamous metaplastic cells. Our age-specific results are presented in Table 1.

Although Reissman's data do seem to indicate an improved yield of endocervical cells using a Milex spatula followed by a Cytobrush, caution is needed prior to widespread utilization of this technique. As he correctly suggests, the Hawthorne effect may account for some of the differences in Papanicolaou smear adequacy between those performed with the Milex spatula and Cytobrush cell collector compared with the concurrent and historical controls. In addition, the

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poor yield of endocervical cells in all other phases of the study (less than 60 percent regardless of the setting, Papincolaou smear method, or age of patient) indicates that his setting may not be generalizable and that other

TABLE 1. AGE-SPECIFIC ENDOCERVICAL CELL RECOVERY FOR PAP SMEARS FROM OLDER WOMEN

Patient Age (years)	Number	Endocervical Cells No. (%)
46–50	183	127 (69)
51–55	117	75 (64)
56–60	123	64 (52)
61–65	161	88 (55)
66–70	131	65 (50)
71–75	107	41 (38)
76–80	61	27 (44)
>81	27	11 (41)
Total	910	498 (55)

factors may have been responsible for the improvement noted in phase 3 of the study.

We believe that properly controlled trials are needed to compare the Milex spatula and moist swab with the Milex and Cytobrush instrument in unselected groups of postmenopausal women.

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EFFECTIVENESS OF FOLLOW-UP REMINDER METHODS

To the Editor:

In his study of the relative effectiveness of mailed and telephone reminder methods for encouraging high-risk patients to obtain influenza vaccinations (*Brimberry R: Vaccination of high-risk patients for influenza: A comparison of telephone and mail reminder methods. J Fam Pract 1988; 26:397–400*), Brimberry concludes that "if successful telephone contact can be made, this [telephone] reminder method is more effective than a letter reminder to increase influenza vaccination rates among high-risk patients."

This conclusion would be warranted only if successful telephone contact as such were unrelated to the likelihood a person would become vaccinated. This does not seem to be the case, since none of the 123 patients not successfully contacted by telephone were vaccinated (derived from the data in Table 1). Based on the 3.8 percent vaccination rate in the control group, one would have expected to find about five patients with vaccinations in this group. Hence, the relatively high vaccination rate among the telephone reminder group that was successfully contacted is in part due to the fact that persons who are more easily reached by telephone are also more likely to get vaccinations independent of the content of the telephone message. Therefore, although the telephone method may in fact be superior to the mailed reminder method, the degree of superiority is overstated in this study, which, of course, has significant implications for comparisons of the relative cost-effectiveness of the two approaches.

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RESEARCH METHODOLOGIES

To the Editor:

Drs. Bell and Dippe's paper[1] on "Recognition and Treatment of Hypercholesterolemia in a Family Practice Center" states in the abstract and methods that charts were reviewed "retrospectively." The term *retro-*

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spective has both a general common usage and a more precise methodological (epidemiological) definition. The general definition of retrospective is "directed to the past, looking or directed backward."[2] The methodological use of retrospective is to describe a research design that is longitudinal, linking current outcomes with measurements of events that occurred in the past, as in case-control studies.[3–7] Researchers should distinguish cross-sectional study designs, which collect data on a patient at one point in time, from longitudinal designs (both retrospective and prospective), which collect data on a patient at several points in time. The study by Drs. Bell and Dippe is clearly a cross-sectional chart review, examining multiple variables from 93 patients with cholesterol levels greater than 6.2 mmol/L, but they do not link current outcomes with any events in the past.

It is vital to describe methodology precisely so that other researchers can interpret and replicate findings and inferences presented in a published article. Most researchers recognize that while the term *significant* has a general definition of "meaningful,"[2] in research papers it means that a finding has a statistical probability of occurring by chance at a rate less than a particular alpha level. The term *retrospective* in research papers should be limited to the description of studies that collect data at several points in time, one in the present, others in the past, and relate the present and past data for each individual studied.

We appreciate the opportunity to comment on this issue.

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The preceding letter was referred to Dr. Bell, who responds as follows:

We appreciate the comments by Muncie, Sobal, and DeForge regarding our recent article in The Journal. We agree that our study is a cross-sectional chart review. Recognition of hypercholesterolemia was examined at one point in time rather than longitudinally.

We disagree, however, with the statement that retrospective studies are by definition longitudinal. Retrospective studies are defined by Friedman as those using observations that have been recorded in the past.[1] Marks states that there are two types of retrospective studies: case-control studies, which are longitudinal, and cross-sectional studies, which examine a single point in time.[2] Prospective studies, on the other hand, are by definition longitudinal and include randomized controlled clinical trials and cohort studies.

We conclude that our study is retrospective, but characterizing it as a cross-sectional chart review is more descriptive and useful. We agree that it is important to precisely describe methodology and believe that we have done so in our study.

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