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The Reply:

I was amazed to read Drs. Rucinski and Schein's Letter to the Editor concerning our article.¹ Amazed, because this letter is a lengthy and not very original essay (with 13 references) dealing with a completely unrelated topic: namely, the advantages and disadvantages of barium and Gastrografin in emergency contrast studies.

It is legitimate for Drs. Rucinski and Schein to point out differences in patient selection and results between our study and the one by Assalia et al.² However, it is difficult for me to accept the unfounded claim that the results published by us "may not be entirely valid" without supporting this claim by solid facts.

The authors very clearly point to the basic difference in the two studies, namely, patient selection. The Assalia study deals exclusively with partial

small bowel obstruction, a very special group whose condition, according to Assalia et al "... may constitute a benign variant of intestinal obstruction because almost 90% of the cases respond to conservative measures." And, indeed, the Assalia et al study reported 90% success in their patients treated with Gastrografin, a figure identical to that reported by Brolin³ who treated his cases with nasogastric decompression alone. In comparison, 79% of the Assalia et al control group responded to conservative therapy, the difference between the two study groups being nonsignificant ($P = 0.12$). In our study, all patients with intestinal obstruction with no further selection were accepted to the study. In this nonselected group of patients with postoperative small bowel obstruction, water-soluble contrast material offered no therapeutic advantage.

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ABDOMINAL WALL HERNIAS WITH ABDOMINAL AORTIC ANEURYSMAL VERSUS AORTOILIAC OCCLUSIVE DISEASE

To the Editor:

Because of our ongoing interest in risk factors for aneurysmal disease, we read the recent article by Hall et al¹ with great interest. The authors concluded that patients with abdominal aortic aneurysms are more likely to develop a ventral incisional hernia than patients undergoing surgery for aortoiliac occlusive disease ($P < 0.05$). They further suggested that patients with aneurysmal disease are more

likely to develop a recurrence after repair of an abdominal wall hernia compared with patients without aneurysms ($P < 0.01$). Since the authors did not report relative risks and confidence intervals for these associations, we calculated them from the reported data. To our surprise, none of the associations reported in their paper reached statistical significance using the chi-square test, the same test used by the authors.

Another concern is that the authors indicate that patients with aneurysmal disease did not have a higher incidence of inguinal hernias. This conclusion might also be questioned because of the relatively small sample size. In fact, their data indicate that the aneurysm patients had 1.3 times the risk of inguinal hernia compared with patients with occlusive disease. While this increased frequency was not statistically significant, the 95% confidence interval ranged from 0.7 to 2.4. This relatively wide confidence interval is therefore consistent with a more than twofold increased risk of inguinal hernia in the aneurysm group.

There were also potentially important gender differences between aneurysm patients and patients with occlusive disease, but there was no attempt to adjust for this by using a stratified analysis or multivariate analysis.

It may turn out that aneurysmal disease is, in fact, associated with an increased risk of incisional or recurrent hernias. However, this association is certainly not secure, given the small sample size utilized in this study and the problems with the statistical analysis.

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1. Hall KA, Peters B, Smyth SH, et al. Abdominal wall hernias in patients with abdominal aortic aneurysmal versus aortoiliac occlusive disease. *Am J Surg.* 1995;170:572-576.

The Reply:

I believe we made it very clear in our manuscript that this was a retrospective study and we did not want to do any fancy statistics on the data. I don't