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DISCUSSION.—DR. RUDOLPH M. LANDRY, Chattanooga, Tenn.: I enjoyed Dr. Morton's paper on abdominal trauma very much. We have been interested in the problem for some time, and it is very much of a problem particularly when it is associated with multiple injuries. To illustrate this I would like to tell of one case we have recently had, a young girl who was in an automobile accident, and was admitted to the hospital in a comatose condition. The pupils were dilated, the right chest was not aerating well, and x-ray proved a partial pneumothorax. Immediate tra-

cheotomy was done and a thoracotomy tube was inserted, with improvement. This girl reached a semiconscious state, but did not respond satisfactorily to anti-shock measures. Still nothing definite in the abdomen could be found, but we have found that abdominal paracentesis is of great help particularly in these cases. A tap was done and blood was recovered, after which she was immediately taken to the operating room, and exploration revealed a ruptured spleen, and also a large laceration of the right lobe of the liver. The spleen was removed and the laceration was repaired. She did well, but two days later developed a left partial pneumothorax which required a left thoracotomy tube. At any rate she went on to recovery, but the point I would like to make is the difficulty in diagnosis of these cases, particularly those with multiple injuries, and the value of an abdominal paracentesis.

DR. MARSHALL L. MICHEL, JR., New Orleans, La.: I certainly enjoyed both the paper by Dr. Morton and Dr. Landry's discussion. I would like to say a few words about retroperitoneal duodenal injuries which are the most treacherous of the gastro-intestinal injuries.

This injury often occurs following trivial abdominal trauma. There are two diagnostic points that should be kept in mind; first, the x-rays of the abdomen will often show air in the retroperitoneal tissues. A second finding that may be evident on careful examination of a patient with a retroperitoneal duodenal injury, is pain referred down into the right groin or into the right testicle. Rarely will a duodenal injury, unless it is on the anterior wall, produce pneumoperitoneum.

These injuries are often the result of relatively slight trauma. It is easy to miss the diagnosis as such injuries may be overlooked at laparotomy. It is important, if inspection is not entirely satisfactory, that the duodenum should be well mobilized in order to adequately inspect the posterior wall.

DR. J. RAYMOND HINSHAW, Rochester, N. Y. (closing): I should like to thank the members of the Association not only for the privilege of the floor and their kind invitation to be here, but also for their many valuable contributions to the literature on blunt trauma to the abdomen. In preparing this paper, we have had the help of contributions ranging from the paper written by Dr. Trimble in the early 30's to Dr. Glenn's published this year, and the references between these two read almost like a roll call of this Association. I mention this because, if you yourself have not written a paper on this subject, almost certainly either the man on your right or the man on your left has. I would like particularly to thank Dr. Landry and Dr. Michel for discussing the paper.

(Slide) The slide which I had hoped would appear illustrates what one may expect to find at operation when there has been a retroperitoneal rupture of the duodenum. The slide you see does not belong with this paper, but because the hour is late I shall not wait for the other one to be found.

Our series is quite small, but we are losing hope that we shall ever be able to report a large number of such cases. This means that the automobile has arrived in Rochester, too. Our 121st case report was provided by yesterday morning's paper which I read on the plane on my way here. This article also mentioned that traffic fatalities in our county, outside the city limits, are 50 per cent greater this year than last. Twenty-five years ago Dr. Robertson was quite concerned because of the serious accidents which befell passengers riding in the rumble seat. Today, we are distressed by the increasing power and speed of cars. Probably in another 25 years our paper will sound just as old-fashioned as Robertson's when some member of this Association reads a paper here on trauma to the abdomen due to flying saucer accidents.