

### Reply

To the Editors:

I would like to reply to Dr. Harold Laufman's letter. First, I quite agree that a high order of barrier control represents the best possible practice within the operating room environment. The photograph commented upon was taken in 1971. Through the slow but necessary process of committees and recommendations within our hospital organization, we have achieved improved covering of the skin and hair.

With regard to Dr. Laufman's last paragraph, I am afraid he has misinterpreted a great deal of the article. The last sentence of the abstract, as well as the last sentence of the introduction of the paper, points out that we were not able nor did we attempt to separate out the relative merits of each facet of the program designed to control both endogenous as well as exogenous sources of infections.

I do agree with him, however, that excellent housekeeping procedures, traffic control, and a good barrier program will reduce the concentration of airborne bacteria without special high flow unidirectional ventilation devices.

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### Hepatic transplantation

To the Editors:

I want to comment on the imprecise focus of a recent editorial by J. Terblanche<sup>1</sup> of Cape Town. The important question which Terblanche failed to address was whether successful total liver replacement could result in the cure of intrahepatic duct cell carcinomas which otherwise would have to be treated with palliative measures such as he was promoting. Terblanche's condemnation of an attempt at cure by liver replacement was based on the mortality rate after hepatic transplantation. He mentioned that 19 of our first 90 patients had survived for at least a year at the time of a presentation by me in Mexico in October, 1974.

A report of these 90 consecutive cases plus three more is available.<sup>3</sup> The actual one year survival rate turned out to be 27 of 93. Obviously, a number of our patients were alive at the time cited by Terblanche but with follow-ups of less than a year. The high mortality rate was strongly influenced by the diseases affecting the native liver which, in turn, determined the technical and other hazards of treatment. It was not

surprising that the worst results were with alcoholic cirrhosis.

For obvious reasons, carcinomas of the main hepatic duct junction were at the "easy" end of the spectrum. Three of our 93 recipients carried this diagnosis. It was the mortality rate in this small subgroup that would be relevant in Terblanche's discussion. One patient died early of a surgical technical complication. The other two are alive with normal liver function after 2 and 1½ years, respectively. Unfortunately, the patient with the longer follow-up has recurrences which have homed to the transplant.

My opinion is well known<sup>2, 3</sup> that liver transplantation for any kind of primary hepatic malignancy is a controversial undertaking because of the uncertain curability. It is axiomatic in any given case that the outcome will depend in part on the extent of the neoplasm at the time of operation. It may be hoped that strategically placed but very small duct cell carcinomas are more favorable lesions than the bulky liver tumors which almost always have recurred in our experience.<sup>2, 3</sup> But this issue is not settled yet and will not be without longer follow-ups and without further trials of transplantation in carefully selected patients.

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### REFERENCES

1. Terblanche, J.: Is carcinoma of the main hepatic duct junction an indication for liver transplantation or palliative surgery? A plea for the U tube palliative procedure, *SURGERY* 79: 127, 1976.
2. Starzl, T. E., and Putnam, C. W. Experience in hepatic transplantation, Philadelphia, 1969, W. B. Saunders Company.
3. Starzl, T. E., Porter, K. A., Putnam, C. W., et al.: Orthotopic liver transplantation in ninety-three patients, *Surg. Gynecol. Obstet.* 142: April, 1976.

### Reply

To the Editors:

I am grateful for this opportunity to reply to Dr. T. E. Starzl's comments on my recent editorial.<sup>1</sup>

Carcinoma of the main hepatic duct junction is a very specific condition, and I must take issue with Dr. Starzl's contention that the focus of the editorial was imprecise. My emphasis throughout was on "at present" and "the best treatment available today." The important updated data on his liver transplant experience, including the three patients with this condition,