1532

Letters to the Editor

PORTAL VEIN THROMBOSIS AND LIVER TRANSPLANTATION

Our attention has been drawn to the June 1992 issue of HOSPITAL PHYSICIAN, particularly the section on Board Review in Internal Medicine.[1]

On the issue of portal vein thrombosis (PVT) in orthotopic liver transplantation (OLTX), we wish to bring to your attention, the response to question 15: "Of the following, which represents the most important contraindication to liver transplantation?" The answer was Portal Vein Thrombosis (D); and the subsequent explanation, "Portal vein thrombosis technically precludes successful liver transplantation."

In 1992, PVT by itself, is not a contraindication to OLTX. Rapid advances in liver transplantation over the years, particularly the last decade, have led to the identification and successful resolution of several problems that had previously contraindicated or made liver transplantation a hazardous enterprise.[2] Without question, the problem of PVT was a difficult one in OLTX. However, by 1985, Shaw et al[3] had reported on the successful reconstruction of the portal vein in two patients with PVT undergoing OLTX. Later in 1986, Lerut et al [4] published the University of Pittsburgh experience (from 1980 to 1984) at not only portal vein but also vena cava reconstruction for various associated occlusive and hypoplastic abnormalities in patients undergoing OLTX. Despite these successes, refinement in technique continues as demonstrated by Tzakis et al[5] using the venous jump grafts in PVT in 1989. Furthermore, just recently, Stieber et al[6] in 1991, expanded the work on the spectrum of PVT in liver transplantation replete with graphic details on the several techniques currently used to ensure successful revascularization in patients with PVT undergoing OLTX.

As these developments unfolded, Maddrey and Van Thiel[7] as far back as 1988 indicated that several problems (PVT being one of them) that had originally been listed as contraindications to liver transplantation were no longer so.

Taken together, therefore, we are of the opinion that from our experience and from a review of the literature, PVT by itself no longer constitutes a contraindication to liver transplantation.

REFERENCES

1. Babyatsky MW. Board review in internal medicine: liver diseases. *Hospital Physician.* 1992;28:63-38.
2. Starzl TE, Demetris AJ. Liver transplantation: a 31-year perspective. Curr Probl Surg. 1990;27:49-240.
3. Shaw BW, Jr, Iwatsuki S, Bron K, Starzl TE. Portal vein grafts in hepatic transplantation. Surg Gyne Obstet.

1985;161:67-68.
4. Lerut J, Tzakis AG, Bronk, et al. Complications of venous reconstruction in human orthotopic liver transplantation. *Ann Surg.* 1986;205:404-414.
5. Tzakis A, Todo S, Stieber AC, Starzl TE. Venous jump grafts for liver transplantation in patients with portal vein thrombosis. *Transplantation.* 1989;48:530-531.
6. Stieber AC, Zetti G, Todo S, Tzakis AG, et al. The spectrum of portal vein thrombosis in liver transplantation. *Ann Surg.* 1991;213:199-206.
7. Maddrey WC, Van Thiel DH. Liver transplantation: an overview. *Hepatology.* 1988;8:948-959.

O. Odocha, MD
A.C. Stieber, MD
A.G. Tzakis, MD
D.H. Van Thiel, MD
T.E. Starzl, MD, PhD
Department of Surgery
Division of Transplantation
University of Pittsburgh School of Medicine
Pittsburgh, Pa.

EDITOR'S NOTE:

The author of the original article concurs with the conclusions of Odocha et al.

ICE WATER: NOT THE ANSWER TO HEAT STROKE

I was intrigued to read the article in the September 1992 issue on heatstroke (Ukiwe J. Heat stroke. *Hospital Physician.* 1992;28:46-49.). The author recommended using icepacks rubbed on the body to get the temperature below 101°F. He is aware that ice water and similarly cold substances will induce vasoconstriction, thereby making the job of heat dissipation harder.

Saudi Arabia, the site of the Annual HAJJ, is frequently faced with the problem of older and otherwise unacclimatized individuals descending en masse for weeks at a time. They have tried a variety of treatments for this condition and found that the most effective was placing the patient in a temperate room and exposing them to a strong ventilating system. I cannot cite you the appropriate references, but this was a topic discussed in our tropical medicine journal club about two years ago.

Robert Winshall, MD, MPH
Richmond, Calif.

TORADOL INFORMATION CLARIFIED

In your September 1992 issue [Rx Update. *Hospital Physician,* 1992;28(9):52], information about Toradol (ketorolac tromethamine), the nonsteroidal anti-inflammatory drug (NSAID) marketed by Syntex Laboratories and Roche Laboratories, was discussed. We would like to clarify the information presented regarding the safety of using ketorolac for periods beyond 5 days. Although both intramuscular (IM) and oral ketorolac are indicated in the management of pain, the recommended duration of use is different for the two forms of ketorolac. Toradol^{IM} is indicated for the short-term management of pain for up to 5 days. Safety studies of IM ketorolac have not been conducted beyond 5 days. The use of Toradol^{ORAL} is, however, not restricted to 5 days. Oral ketorolac is indicated for limited duration use, as needed in the management of pain.

Ketorolac shares the risks associated with other NSAIDs when taken chronically, including the potential to cause gastrointestinal (GI) bleeding, ulceration, and perforation. As with other NSAIDs, ketorolac should be used with caution in patients with a prior history of serious GI events, and patients with other risk factors known to be associated with peptic ulcer disease (particularly elderly patients); patients with impaired renal or hepatic function, or a history of kidney or liver disease; patients with coagulation disorders, and patients receiving drug therapy that interferes with hemostasis. It should also be noted that ketorolac is contraindicated in patients with previously demonstrated hypersensitivity to ketorolac, or in those with the complete or partial syndrome of nasal polyps, angioedema, and bronchospastic reactivity (eg, asthma) or other allergic manifestations to aspirin or other NSAIDs. The Toradol package insert should be consulted for full prescribing information.

Ronald H. Lewis, MD
Senior Associate Medical Director
Medical Services Department
Syntex Laboratories, Inc
Palo Alto, Calif.

Hospital Physician welcomes your comments on these and other important medical issues. Please send your comments to:

Editor, HOSPITAL PHYSICIAN
125 Strafford Ave, Suite 220
Wayne, PA 19087-3391