Perfusion Monitoring during Radical Perineal Prostatectomy

To the Editor.—Radical perineal prostatectomy (RPP) is often performed with the patient in the exaggerated lithotomy position (fig. 1). In this position, the feet may be high above the heart, with the potential for complications subsequent to poor perfusion, such as compartment syndrome, if the blood pressure is not maintained at an adequate level.

To monitor perfusion in the foot, we routinely place a pulse oximeter probe on one of the toes. When the foot is perfused, the pulse oximeter displays a normal tracing. When the blood pressure decreases below a threshold value for that patient, no pulse waveform is displayed, alerting the anesthesiologist to the situation and allowing steps to be taken to return perfusion, thus averting potentially deleterious consequences. The continuous display of the waveform also provides reassuring documentation throughout the procedure that distal perfusion is being achieved. Although we realize that such a method cannot guarantee adequate perfusion in all parts of the limb, its simplicity argues for its use.

We would recommend that this simple monitor be used in all such cases.

James Y. Findlay, M.B.Ch.B., F.R.C.A.
Fellow

Steven R. Rettke, M.D.
Consultant, Department of Anesthesiology

Robert P. Myers, M.D.
Consultant, Department of Urology
Mayo Foundation
200 First Street SW
Rochester, Minnesota 55905

Reference


(Accepted for publication April 25, 1997.)

Fig. 1. Patient positioned for radical perineal prostatectomy. The pulse oximeter probe can be seen attached to a toe.