Xe JOURNÉES ALPINES DE CARDIOLOGIE ET CARDIOCHIRURGIE
TENTH CARDIOLOGICAL AND CARDIOSURGICAL ALPINE MEETING
Ten pig heart homotransplantations have been done after a 24 to 30 hours preservation.
For this preservation, a circuit including a reservoir, a peristaltic pump, a Dideco heat exchanger and a container, in which the perfused heart was maintained at a 20-22 cm H₂O pressure, have been used.
The solution of preservation is a modified Krebs solution in which potassium level was different; preservation temperature is 6-7°C.
Donor heart has been arrested with a cardioplegic solution at 4°C and then placed in the preservation solution.
After 24 to 30 hours, the heterotopic abdominal homotransplantation has been achieved, by end-to-side anastomosis of donor main pulmonary artery to recipient inferior vena cava, and donor aorta to recipient abdominal aorta.
During the preservation, pH, CPK and donor heart weight have been essentially considered.
In nine cases, functional recovery of heart has been quite satisfactory; all these surviving pigs have been killed 15 days postoperatively and, in every case a pathologic and microscopic study has been done. The only failure is thought to be related to heart weight, pH and CPK increase.