News and Notes

BLOOD REUSE "EFFECTIVE" IN PREGNANCY HEMORRHAGE

Blood reinfusion is "an effective means" of managing intra-abdominal hemorrhage in ruptured extrauterine pregnancy, according to Drs. S. S. Selitskaya, V. B. Khvatov, and N. I. Tikhomirova. They reviewed a total of 2,147 blood reinfusions in such cases, and investigated the morphological, biochemical, and some coagulation properties of peritoneal and venous blood drawn before and after reinfusions in 101 patients.

"The peritoneal blood was found to have a number of specific features, such as lack of fibrinogen, an elevated level of free hemoglobin, and activated fibrinolysis," the researchers reported. Following reinfusion "of fibrinated blood with an elevated proportion of free hemoglobin (20 to 300 mg%), no complications were observed.

"The features of the peritoneal blood should not be regarded as contraindications to reinfusions," the investigators said. "A higher fibrinolytic activity of the peritoneal blood serves as a natural preventive factor of thromboembolic complications in the postoperative period."

MERCURIAL SALTS EASE PROTEINURIA IN RENAL PATIENTS

Proteinuria and malignant hypertension in patients with end-stage renal disease who are on maintenance hemodialysis have been successfully treated by medical nephrectomy with mercurial salts, Dr M. M. Avram, of Long Island College Hospital, Brooklyn, N.Y., reported here.

Massive proteinuria was abolished and protein balance and normotension restored in three patients with proteinuria of 25g or more for 24 hours by administering mercaptomerin sodium in solutions of 125 mg per 2 ml daily for six days, Dr Avram revealed in his report to the 14th International Congress of Internal Medicine.

DRUG DEVELOPED TO REDUCE BRAIN ISCHEMIA AFTER HEAD INJURY

A New York researcher reports successful use of furosemide in reducing posttraumatic ischemia changes in a small sampling of severe head injury victims.

"Irreversible damage occurs on impact," says Dr. James E. Cottrell, Associate Professor of Anesthesiology, New York University Medical Centre and Associate Director, Department of anesthesiology, Bellevue Hospital Centre, "so effective therapy must deal with the secondary changes that appear within minutes of the insult." These changes include pericapillary edema and neuronal swelling which, if not treated, contribute to intracranial pressure and can lead to eventual cell death.

Speaking at the annual meeting of the American Society of Anesthesiologists here, Dr Cottrell reported on the treatment of 15 head injury patients with the diuretic.

All the patients had previously been treated with conventional drugs, including IV methylprednisolone, mannitol, and phenobarbital. Furosemide was given prior to surgery, and repeated dosages were administered every four hours during and after surgery whenever intracranial pressure rose above 20 torr (mm Hg).

Pressure decreased, by more than half, within 25 minutes of administering the drug.

Of the 15 patients, five had good recovery, two were left with modified disability, one was severely disabled, one was vegetative, and six died.

"Our outcome compares favourably with other reports and probably represents aggressive management of the severely head-injured patients with the addition of another beneficial pharmacologic agent," said Dr. Cottrell. He emphasised the importance of such research by noting that trauma is the leading cause of death among people under age 45.

LENGTH OF HUMAN LIFE RELATES TO DISEASE CONTROL

A German scientist who doubts the authenticity of reports of people living to very old ages has proposed instead that no human can expect to live past 120 years.

Dr. Pieter Platt, Professor at the Centre for Internal Medicine of Giessen University, said that the oldest human whose age was absolutely documented lived to be 116 years old. He believes that none of the famous, long-lived people from Uzbekistan in Russia, Vilcabamba in Ecuador, and the Hunza region of Kashmir have been able to satisfactorily prove their ages.

Dr. Platt, a specialist in gerontology, points out that the average length of life differs in different environments. In West Germany, it has doubled in the last 125 years and is now about 74 years. Japan has the highest life expectancy — 78 years for women and 74 for men. The average US baby can expect to live to be 73.

DISEASE CONTROL

Although there are a few optimistic scientists who feel it might be possible to raise life expectancy to around 100 years, Dr. Platt agrees with the majority of gerontology experts who believe this is highly speculative.

Up to now, the increase in the length of human life can be generally related to disease control. But elimination of the major causes of death — arteriosclerosis and malignant tumors — would only raise the average life expectancy 10 to 15 years, according to Dr Platt. Therefore, any major change beyond that would have to be from a retardation of the aging process.

Dr Platt suggests several hypothetical ways to retard the aging process: diet, drugs, reducing body temperature 1°F, and genetic manipulation.

NEPHRECTOMY RELIEVES BP AFTER KIDNEY TRANSPLANT

Kidney transplant recipients with postoperative hypertension might have their high blood pressure relieved by subsequent removal of their two native kidneys, according to recent study at the University of Kentucky transplant clinic.

Of 10 allograft recipients with persistent postoperative hypertension, nine experienced a 30 mmHg drop in mean arterial blood pressure following bilateral nephrectomy of their native kidney, Dr. John J. Curtis, of the UK clinic, told the American Society of Nephrology here recently. Dr Curtis cautioned, however, that the data "not be interpreted to advocate routine pretransplant bilateral nephrectomy. The vast majority of our patients are not hypertensive."

Sixty-eight patients at the clinic met four basic criteria for the study, both native kidneys were still in place, transplant surgery had been done at least a year before, the allograft was functioning well, and they were on alternate-day steroids. Of these, 15 patients (22%) had hypertension, defined in the study as a diastolic pressure of 90 or more, or requiring hypertensive medication, or both. Ten of them then underwent bilateral nephrectomy.

Six months after the operation, nine patients showed a mean arterial blood pressure drop from 125 mmHg to 95 mmHg. The average number of antihypertensive medications per patient also dropped, from 2.5 to 0.8. Before surgery, all nine had required medication. Afterwards, six maintained normal blood pressure without any drugs at all, while the other three were on reduced medication. The one patient who did not show improvement had recurrent glomerulonephritis, revealed by a subsequent biopsy of his implanted kidney.

The mechanism by which the diseased kidneys may cause hypertension is not clear, Dr Curtis said.

Of the nine improved patients, surprisingly, four showed stenosis of the graftrenal artery; three had higher renal vein plasma renin activity in the allograft than in their native kidneys; and two had both conditions. Thus Dr Curtis concluded that renal vein measurements are probably not useful in predicting response to bilateral nephrectomy.