TABLE I—Results of a Trial of Bleomycin in the Reticuloses

Diagnosis	No. of Cases	Complete Remission	Partial Remission	Some Effect	Failure
Hodgkin's disease	54	2	14	16	22
Lymphosarcoma	17	1	6	3	7
Reticulum cell sarcoma ..	22	0	8	4	10
Mycosis fungoides	7	1	3	1	2
Total	100	4	31	24	41

Most of the patients were in a late stage of these diseases and had received a considerable amount of conventional chemotherapy and radiotherapy. This is illustrated by the patients with Hodgkin's disease, half of whom were in stage IVB (Table II).

TABLE II—Patients with Hodgkin's Disease Receiving Bleomycin

No. of cases	Stage: ..	IIB 2	IIIA 2	IIIB 13	IVA 9	IVB 27
--------------	-----------	----------	-----------	------------	----------	-----------

Discussion

The combined complete and partial remission rate of nearly 30% in patients with late Hodgkin's disease shows that this agent may be of use in the treatment of this condition. However, the report by Nicholson *et al.* (1970) on combination chemotherapy in late Hodgkin's disease in which patients at a similar stage having had both chemotherapy and radiotherapy achieved a 35% complete remission rate, and the recent report of complete and partial remission in 47% using bis-chlorethyl-nitrosourea (BCNU) (Young *et al.*, 1971), put the present results into perspective. Because of its unique marrow-sparing

property bleomycin should be considered for the treatment of Hodgkin's disease when there is evidence of poor bone marrow reserve.

Of six patients with Hodgkin's disease who had pulmonary infiltration, two showed complete disappearance of infiltration and effusions while in the other four there seemed to be no effect. In two patients with lymphosarcoma, one with an effusion and one with pulmonary infiltration, there was no effect, but a patient with reticulum cell sarcoma and lung metastases responded with complete disappearance of the growth. A feature of the use of bleomycin in reticulum cell sarcoma was the rapid disappearance of skin lesions with small doses, and about half the patients with mycosis fungoides showed a response in the severity and extent of the infiltration. No definite specificity for dermatological lesions was noted and with one exception the dramatic improvements that have been reported in mycosis fungoides were not seen in this series.

Requests for reprints should be addressed to the Secretariat, Co-operative Group, "Leucémies et Hématosarcomes" O.E.R.T.C., Institut de Cancérologie et d'Immunogénétique, Hôpital Paul-Brousse, 14 Avenue Paul Vaillaut Couturier, 94 Villejuif, France.

Bleomycin was supplied by Roger Bellon Laboratories and Lundbeck Research, Welwyn.

References

- Ichikawa, T. (1969). *Nihon Ishikai Zasshi*, 61, 487.
- Nicholson, W. M., *et al.* (1970). *British Medical Journal*, 3, 7.
- O.E.R.T.C. Clinical Screening Group (1970). *British Medical Journal*, 2, 643.
- Peters, M. V., Alison, R. E., and Bush, R. S. (1966). *Cancer (Philadelphia)*, 19, 308.
- Umezawa, H. (1965). *Antimicrobial Agents and Chemotherapy*, 5, 1079.
- Young, R. G., DeVita, V. T., Serpick, A. A., and Canellos, G. P. (1971). *New England Journal of Medicine*, 285, 475.

MEDICAL MEMORANDA

Fetal Survival after Partial Extrusion into the Bladder

A. M. HASSIM, CYNTHIA LUCAS,
R. J. ACHARYA

British Medical Journal, 1972, 1, 286-287

A case of partial extrusion of the fetus into the bladder is reported. Search of the literature failed to disclose a similar case in which both mother and baby survived.

Case Report

A 38-year-old para 8 gravida 9 was admitted to the labour ward as an emergency case on 22 May 1971. She stated that she was in

her ninth month of pregnancy and that she had been attending one of the district antenatal clinics. Pregnancy had progressed without complication. Labour contractions began seven hours before admission. Three hours previously she started draining blood-stained liquor and developed continuous lower abdominal pain.

Her first seven pregnancies, labours, and puerperia were normal. Her last delivery in 1969 was by lower segment caesarean section for placenta praevia. Notes on that delivery indicated difficulty in obtaining haemostasis because of large veins coursing over the lower segment. The puerperium was uncomplicated.

On admission her general condition was good. The temperature was 98.4°F (36.9°C), pulse 90/min, and blood pressure 110/65 mm Hg. There was some pallor of the mucous membranes. The cardiovascular and respiratory systems were normal. On abdominal examination a median subumbilical scar was present. The uterine fundus was consistent with a 36-week pregnancy. The lie was longitudinal and one-fifth of the head was presenting above the pelvic brim. The lower segment was distended and tender. The uterus was tense between contractions, which lasted 50 seconds every four to five minutes. The fetal heart was audible at 108/min. Vaginal examination showed the cervix to be dilated 4 cm and poorly applied. The vertex was presenting in the occipitoposterior position 2 cm above the level of the ischial spines. Heavily blood-stained liquor drained from the vagina. The urine was blood-stained. Rupture of the previous caesarean scar was diagnosed and immediate resuscitative measures were begun. One litre of compatible blood was ordered and the patient was transferred to the theatre.

University Teaching Hospital, Lusaka, Zambia

A. M. HASSIM, F.R.C.O.G., Professor of Obstetrics and Gynaecology
CYNTHIA LUCAS, M.R.C.O.G., Consultant Obstetrician and Gynaecologist
R. J. ACHARYA, M.B., B.S., Senior House Officer

LAPAROTOMY

The abdomen was opened through a paramedian incision alongside the previous scar. On reaching the peritoneum it was found only in the uppermost third of the incision. The lower two-thirds was extraperitoneal and occupied by a grossly distended bladder, which was drawn up towards the umbilicus. The peritoneal cavity was opened and the incision extended upwards. The lower segment showed pronounced oedema and bruising. The uterovesical peritoneum was opened, bringing into direct view a fetal limb through a concomitant rupture of the previous caesarean scar and the urinary bladder. The entire fetal head was located within the bladder, which stretched over it like a bathing cap. The remainder of the fetus was in the uterine cavity.

The ruptured transverse scar was widened under vision with a pair of scissors and the baby delivered as far as the neck by breech extraction. The head, which was in the occipitoposterior position, was then extracted from the bladder. This resulted in the birth of a healthy male infant with an Apgar score of 6/10 at one minute. All layers of the bladder were involved in a laceration from the trigone for a distance of about 8 cm measured in the partly contracted state after delivery. In addition to the ruptured scar a vertical laceration extended from it to beyond the cervix into the vagina for a few centimetres. The edges of the ruptured bladder were firmly adhered to the lower segment, from which it could be separated only by sharp dissection. The ureteric orifices were visible on each edge of the laceration.

Both ureters were catheterized. The bladder was dissected free with some difficulty because of its adherence. Total hysterectomy was performed with conservation of the Fallopian tubes and ovaries. Suprapubic cystostomy was carried out with a Malécot catheter. The bladder was repaired in two layers and extraperitonealized, the ureteric catheters being removed at the end of the operation. The vaginal vault was incompletely closed to allow drainage. One litre of blood was transfused and a course of ampicillin prescribed. Except for pyrexia on the first and second days the postoperative period was uneventful. The suprapubic catheter was removed on the ninth day and both mother and baby were discharged on the 14th day. Four weeks later the mother was found to be asymptomatic and the baby thriving. An intravenous pyelogram showed no abnormality.

Comment

Extensive laceration of the lower uterine segment may be expected to result in laceration of the adjacent urinary bladder because of the close anatomical relation of the two organs. This is remarkably uncommon, and in a series of uterine ruptures reported by one of us (Hassim, 1967) only 13% showed some form of laceration of the bladder. Oedema of the bladder, bruising, and varying degrees of haematoma occur more often.

If the fetus is not wholly or partly retained in the uterus, as happens in most uterine ruptures, it may be expelled into the peritoneal cavity or rarely into the broad ligament. In a case of pelvic outlet contraction the fetus was expelled and completely retained in the vagina (Morgan, 1960), while in another case extrusion into the bladder had occurred (Devi, 1962). Devi postulated that extrusion of the fetus into the bladder is possible only if the lower segment and bladder are adherent to each other so that rupture of both organs occur simultaneously.

In the present case a haemorrhagic lower segment due to placenta praevia at the last delivery may have necessitated many sutures before haemostasis was secured. This would encourage healing by fibrosis and possible adherence to the bladder wall. The actual rupture through the bladder must have occurred while the patient was being transferred to the operating theatre, because vaginal examination had previously confirmed the presence of the presenting part in the vagina. Early diagnosis and prompt measures resulted in survival of the infant.

References

- Devi, N. S. (1962). *Journal of Obstetrics and Gynaecology of the British Commonwealth*, 69, 140.
Hassim, A. M. (1967). *Medical Journal of Zambia*, 1, 7.
Morgan, I. I. (1960). *American Journal of Obstetrics and Gynecology*, 79, 1107.

Diabetes Insipidus with an ACTH-secreting Carcinoma of the Bronchus

C. DAVIDSON

British Medical Journal, 1972, 1, 287-288

Polyuria commonly occurs in patients with the ectopic adrenocorticotrophic hormone (ACTH)-secreting syndrome (Allott and Skelton, 1960) and is usually ascribed either to glycosuria or to the effect of hypokalaemia on the kidneys. Alternatively hypothalamic metastases may produce true diabetes insipidus. In the following case there was evidence of both defective secretion of antidiuretic hormone (ADH) and an impaired renal response to administered ADH. An unusual feature was the correction of the renal defect by a large dose of dexamethasone.

Case Report

The patient, a 46-year-old labourer, was first seen at the chest unit in 1968 with pulmonary tuberculosis, which was successfully treated

with para-aminosalicylic acid and isoniazid up to his present admission. In 1969, however, routine chest x-ray examination showed a hilar shadow which at bronchoscopy proved to be an inoperable oat cell carcinoma. At that time there were no obvious metastases and he was treated with radiotherapy (2,500 rads).

In January 1970 his condition deteriorated over a few weeks and he was admitted to hospital with a vague history of weight loss, thirst, and polyuria. He was wasted, confused, and dehydrated and was noted to have pronounced pigmentation of Addisonian distribution. There was generalized lymphadenopathy suggesting carcinomatous spread but no radiological evidence of recurrence in the chest. He had 2% glycosuria without ketones and the blood sugar was 350 mg/100 ml. Plasma electrolytes after rehydration showed a hypokalaemic alkalosis—Na⁺ 144, K⁺ 2.5, Cl⁻ 89, HCO₃⁻ 36 mEq/l., urea 24 mg/700 ml—and this with the other findings suggested the ectopic ACTH-secreting syndrome. This was supported by high plasma immunoreactive ACTH and fluorogenic corticosteroid levels which did not suppress with dexamethasone 8 mg daily for three days (Table I). Liver function tests and serum

TABLE I—Plasma Levels of Cortisol and ACTH before and after Dexamethasone Administration

	On Admission	After Dexamethasone
Plasma cortisol in µg/100 ml (midnight : 9 a.m.) ..	46 : 46	45 : 47.8
Plasma ACTH in pg/ml (midnight : 9 a.m.) ..	1,200 : 720	1,300 : —

calcium and magnesium levels were within normal limits. He was initially treated with spironolactone 400 mg/day and potassium chloride 128 mEq/day, and after 10 days the plasma potassium and

Whittington Hospital, London N.19

C. DAVIDSON, M.R.C.P., Senior House Officer (Present address: St. Bartholomew's Hospital, London E.C.1)