At operation a lobulated flabby vascular tumour was partially removed deep to the latissimus dorsi. Though the tumour was mainly encapsulated a radical excision was not possible, since part of it was attached to the spinal process and lamina deep to the surface of the erector spinae muscle.

The specimen consisted mainly of lobulated tumour tissue infiltrating between muscle bundles. It was more reddish brown than fat. Histologically the tumour consisted of fat cells that varied considerably. Some approached the adult type but others had a rounded outline and contained cytoplasm of fine foaming granules of fat (see Fig.). The tumour was not well encapsulated, and there was an intimate relation between the tumour elements and the muscle bundles. The tumour resembled a hibernoma, but in view of the intimate infiltration between muscle bundles it was treated as a form of liposarcoma.

As a result the residual tumour bed was irradiated with megavoltage x-rays to a dose of 4,500 rads in five weeks. The geometry of the treatment fields had to be carefully arranged to avoid irradiating the spinal cord. This hampered a radical approach.

The patient was finally discharged from hospital on a regimen of cyclical oestrogens. At follow-up clinic she remained well, and there was no evidence of tumour recurrence. In addition she had her first episode of breakthrough menstrual bleeding after four and a half months on a priming dose of ethinyloestradiol.

Case of Mumps Nephritis


An association between mumps and renal involvement has been infrequently reported. In a series of 20 cases of mumps in Servicemen, Utz et al. (1964) reported demonstrable transient renal impairment in all cases. There were no symptoms. In all previously reported cases of mumps in which symptoms of renal damage have been present, death has occurred.

**CASE REPORT**

The patient, a girl of 15 years, weighing 7 st. 3 lb. (45.8 kg.), was admitted to hospital on 15 January 1967. She gave a history of bilateral parotid mumps two weeks previously. She had been a contact. Her presenting symptoms were enlarged cervical glands, intermittent vomiting, fever, and a petechial rash on the right forearm accompanied by periportal oedema of four to five days' duration. The latter two features developed some 24 hours after a dose of Metatone (a proprietary preparation containing vitamin-B complex, glycerophosphate, and streptomycin), prescribed by her general practitioner for listlessness. No other drug history was elicited.

Flitting knee arthralgia was present for a period of 24 hours after admission. There was no recent cough or sore throat.

She had been admitted to hospital with abdominal pain seven months previously. Spontaneous remission occurred 24 hours later. She was allergic to sticking plaster, but no other history of allergy was obtained.

On clinical examination she was flushed, with an oral temperature of 103° F. (39.4° C.). The tongue was dry and furred. Also evident was bilateral non-tender cervical adenitis and parotid fullness. Petechial haemorrhages were present on the roof of the hard palate and right antecubital fossa—the Hess test was positive on two successive days. On admission her pulse was 110/minute and her blood pressure 110/70 (see Fig.). Clinically, there was no evidence of tonsillitis or pharyngitis. At no stage did she have pretilial oedema. Her temperature was raised for the first 24 hours only.

In spite of a poor fluid output in the first 24 hours, her fluid balance throughout remained reasonably good from impairment of urine concentration initially. Daily ward urine analysis showed varying amounts of blood and albumin. Early morning midstream specimens produced from a few to numerous red blood cells on microscopic examination. Protein content of urine varied from 0.5 to 2 g./24 hours. Two specimens were productive of occasional granular casts. No pathogen was isolated from the urine. Blood urea and erythrocyte sedimentation rate (E.S.R.) were raised for the

**REFERENCES**


**COMMENT**

Since the description by Turner (1938) of seven examples of sexual infantilism, congenital web neck, and cubitus valgus in females of short stature many additional abnormalities have been described (Lemli and Smith, 1963).

Hibernoma, or brown fat lipoma, is a rare variant of simple lipoma. Only a small number of cases have been reported in the literature (Sandison and Graham, 1959). The tumour arises in brown “hibernating” fat usually found only in human embryos and hibernating animals. The brown fat lipoma has always been described as a simple tumour. So far as we know this is the first report of malignant degeneration in this tumour.

The infrascapular site of the tumour is of interest, since it is mainly in this site that brown fat is found in mammals (Dawkins and Hull, 1964). Moreover, at one time the hibernoma was called the interscapular tumour.

The unusual occurrence of a rare tumour in a patient with Turner’s syndrome is of added interest, since it is recognized that chromosomal damage can lead to malignant disease. In addition, recent studies suggest that certain cancers and congenital defects occur together more often than can be attributed to chance (Miller, 1966).

We are indebted to Dr. J. E. Morison and Dr. W. R. M. Morton for the histological and chromosome investigations. We should also like to thank Dr. A. R. Lyons, Dr. D. A. D. Montgomery, and Dr. D. R. Hadden for their friendly interest and advice.

W. S. B. Lowry, M.B., M.Sc., D.M.R.T.
Royal Victoria Hospital, Belfast, N. Ireland.

P. B. Halmos, M.D., M.R.C.P.I.
University Hospital of West Virginia, U.S.A.
first two weeks; the highest values were a blood urea of 114 mg./100 ml. and an E.S.R. of 50 mm./hour. Antistreptolysin titre (A.S.O.) estimation was 100 international units on the seventh hospital day, and 200 international units 61 days later. Mumps virus serology performed on the first and fourteenth hospital day showed a fourfold increase in titre (+1/20 to +1/80) compatible with a recent mumps infection. Hypertension developed in the first week. The highest diastolic pressure recorded was 130 mm. Hg. There was spontaneous regression without treatment. Total white blood count ranged from 10,000 to 7,000/cu. mm., with normal differentials throughout. Platelet counts on the second and seventh days of illness were 200,000 and 210,000/cu. mm. respectively. Four throat swabs and blood cultures were negative. Serum amylase was 4 units. Serum electrolytes were normal throughout. Paul-Bunnell agglutination was negative. Her management was along symptomatic lines.

Dietary protein was restricted to 35 g. daily, on a fluid load of 2.5 litres/24 hours, until improvement became evident. A course of phenethicillin and chlorpheniramine had no obvious therapeutic effect. Improvement occurred during her stay in hospital, as evidenced by the return of the blood urea and E.S.R. to normal values, the disappearance of haematuria, and the marked diminution of proteinuria.

**COMMENT**

Epidemiological data from Norway in the pre-insulin era suggested a connexion between waves of mumps and increased incidence of diabetes mellitus some years later (Gundersen, 1927). It is recognized that in some children the swelling of the salivary glands in mumps is replaced by a lymphadenitis in the neck (Lancet, 1961). The 1961 mumps epidemic in the United Kingdom differed from previously recognized forms of the disease because of the frequency of gastrointestinal upsets. These observations suggest that medical interest in this condition should no longer be focused exclusively on the salivary glands, pancreas, and nervous system. More recently it has been pointed out that a connexion may exist between gestational mumps and primary endocardial fibroelastosis (St. Gene et al., 1966; Gersony et al., 1966).

A review of the literature produced four cases of nephritis complicating mumps. They were all fatal. In none of these cases was hypertension reported as being a prominent feature (see Table).

<table>
<thead>
<tr>
<th>Contrast Features of Mumps Nephritis and Post-streptococcal Glomerulonephritis</th>
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</thead>
<tbody>
<tr>
<td>Mumps Nephritis (3 cases)</td>
</tr>
<tr>
<td>Throat infection</td>
</tr>
<tr>
<td>&quot;Latent period&quot;</td>
</tr>
<tr>
<td>Cervical adenitis</td>
</tr>
<tr>
<td>Throat culture</td>
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<tr>
<td>Pyrexia of more than 101°F.</td>
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<tr>
<td>W.B.C. more than 10,000 cells/cu. mm.</td>
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<tr>
<td>E.S.R. more than 30 mm./hr.</td>
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<tr>
<td>A.S.O. more than 250 i.u.</td>
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</tbody>
</table>

In the present case the possibility of a Metatone-induced nephritis can be excluded on clinical grounds. Previous administration had been without ill effect. The significance of a transient hypertension and its late sequelae are difficult to assess. In view of the patient’s rapid improvement and subsequent complication, we considered it justifiable to submit her to the added trauma and possible complications of a renal biopsy.

“Viral infection” has been suggested as a cause of some nine cases of acute glomerulonephritis not associated with group A streptococcal infection (Bates et al., 1957). More specifically, three cases (in children) of fatal nephritis developing after mumps infection in the absence of serological or cultural evidence of streptococcal infection have been reported (Hughes et al., 1966).

We suggest that the present case may not be unique and that such cases may not be unusual in adults. If this possibility of a mumps infection as a cause of acute nephritis can be accepted on the evidence presented, then the mumps virus must be added to the lengthening list of nephropathic factors.”

G. E. MONTEIRO, M.B., B.S.,
Medical Senior House Officer.
C. A. LILLICRAP, M.D., F.R.C.P.,
Senior Consultant Physician.
Lincoln County Hospital, Lincoln.

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