revealed a raspberry-like lesion, and dark-ground examination of the exudate disclosed large numbers of treponemata—presumed to be *T. pertenue*.

Serological examination was carried out, and Reiter's protein complement-fixation test (R.P.C.F.) and Price's precipitation reaction (P.P.R.) were both positive. The boy's mother said that he had arrived in this country on November 25, 1957, coming to join his parents, who had been in England for four years. The voyage from Dominica had taken 15 days, and during that time a small ulcer had developed on the outer side of the right ankle. This ulcer had increased in size until treated by the family doctor with penicillin cream, when rapid healing had occurred.

Both parents gave a history of yaws in childhood. They had no signs of syphilis; their standard blood tests were negative, as was the treponemal Wassermann reaction, while the R.P.C.F. was positive in both. The boy had had no sex contact.

On this evidence a diagnosis of secondary yaws was made and a course of penicillin instituted—300,000 units daily for 10 days—and chlortetracycline ointment 1% was applied to the scalp, from which penicillin-resistant and chlortetracycline-sensitive *Staphylococcus aureus* had been cultured. Under this treatment all the lesions disappeared, leaving depigmented areas on the trunk.

A month later the serology was still positive, the P.P.R. only in neat serum. After a further month the P.P.R. had become negative, and the R.P.C.F. alone remained positive.

Summary

A boy aged 10 from Dominica developed an ulcer on his ankle during the voyage to this country. Some weeks later crusted papules appeared on the scalp and trunk, and *T. pertenue* was demonstrated in the serum from one of these lesions. Price's precipitation test and Reiter's protein complement-fixation test were positive in the blood. A diagnosis of early infectious yaws was made; the lesions responded quickly to treatment with penicillin.

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LONG SURVIVAL IN MITRAL STENOSIS A CASE REPORT

BY

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Mitral stenosis is occasionally found, either clinically or at necropsy, in aged patients. Reports of such findings have been made in recent years (Cabot, 1926; Gelfman, 1943; Cookson, 1949; Howell, 1950; Monroe, 1951; Droller and Pemberton, 1953; Hebbert and Rankin, 1954; Bedford and Caird, 1956), and emphasize the good prognosis which such lesions may carry even though the degree of stenosis appears to be severe. It is possible that atheroma accounts for some of these cases, though in many a clear history of rheumatic fever is obtained.

The following case illustrates long survival in a patient with an anatomically severe degree of mitral stenosis who, furthermore, had borne five children.

Case Report

A housewife aged 69 had rheumatic fever in 1902 at the age of 14. She spent six weeks in bed and subsequently

was not allowed to play games. She married and bore five children, the first in 1910, when aged 22, and the last in 1925, at the age of 37. She remained well until February, 1954, when a left-sided hemiplegia developed from which a good recovery was made. When first seen at Addenbrooke's Hospital in December, 1954, she complained of breathlessness on exertion, headaches, and dizziness of ten months' duration.

On examination mitral systolic and mid-diastolic heart murmurs were heard and auricular fibrillation was present. Her blood pressure was 190/100. She had some residual weakness of her left hand. There were no signs of congestive failure. An electrocardiogram confirmed the auricular fibrillation, and cardioscopy showed a moderate degree of enlargement of the left auricle, right ventricle, and left ventricle with increase in hilar pulsation and pulmonary congestion; the aortic knuckle was small. Her blood haemoglobin was 15.2 g. per 100 ml. and her corrected sedimentation rate 10 mm. in one hour (Wintrobe). A diagnosis of mitral stenosis was made and she was treated with digitalis and a low-salt diet with restricted fluids.

She remained fairly well, but in October, 1956, was readmitted with symptoms and signs of pulmonary infarction. Anticoagulants and penicillin were given and she made a good recovery.

When seen again at the out-patient department in November, 1957, she had signs of congestive failure. These responded initially to diuretics, but she rapidly became worse and was readmitted to hospital, where she died 24 hours later.

Necropsy Findings

Cardiovascular System.—The pericardial sac was adherent over the right ventricle anteriorly and the left atrium posteriorly. Both ventricles were dilated and hypertrophied, particularly the right, the lateral wall of which was up to 1 cm. thick. The mitral valve was stenosed and would not admit the tip of one finger; the cusps were fused and calcified and the chordae tendineae thickened and shortened. The cusps of the aortic valve were not thickened and the commissures were normal; the cusps of the pulmonary and tricuspid valves were smooth and thin. The foramen ovale was closed. Ante-mortem thrombus filled the left atrium, partially blocking the inflow from the pulmonary veins, and extended into the left auricular appendage. Atheroma of the entire pulmonary arterial tree was conspicuous with recent ante-mortem thrombus in the lower main branch of the right pulmonary artery and the upper main branch of the left pulmonary artery. There was a moderate degree of atheroma of the coronary arteries, aorta, and great vessels. No ante-mortem thrombus was present elsewhere in the body.

Lungs.—Bilateral pleural effusions were found—600 ml. of straw-coloured fluid in the right pleural cavity and 250 ml. in the left. There was an area of recent infarction in the postero-inferior part of the left upper lobe, with occlusion by ante-mortem thrombus of the artery supplying it, and an area of old infarction with fibrosis in the right lower lobe.

Other Organs.—Old infarcts were present at the upper poles of both kidneys. There were five areas of softening in the brain; two in the thalamus on each side and one in the right hippocampal gyrus. The liver and spleen were severely congested. The peritoneal cavity contained 500 ml. of straw-coloured fluid.

Comment

Cabot (1926), Gelfman (1943), Baker and Musgrave (1947), Cookson (1949), Wood (1954, 1956), Olesen (1955), and Bourne (1957) have all emphasized the long survival of occasional cases of mitral stenosis without aortic lesions. This case illustrates that point and also the fact that pregnancy need not lead to any worsening of the condition.

It is, of course, impossible to say when the stenosis provided a serious mechanical embarrassment to the heart, but it seems likely that the pathological process was initiated in her teens. Possibly a minor degree of stenosis may in later years become more severe by accretion of atheromatous material leading to further fibrosis and calcification, but one can only speculate about this.

My thanks are due to Dr. L. B. Cole and Dr. A. M. Barrett for permission to publish this case and for their helpful comments. I am grateful to Dr. G. A. Gresham for his assistance with the preparation of this paper.

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Medical Memorandum

Influenza Studies in General Practice in the Glasgow Area

In continuation of investigations of influenza-like illnesses in general practice, initiated in 1954 in association with influenza vaccine trials (Grist, Sommerville, and Carson, 1957), 252 patients were studied in the period November, 1956, to April, 1958. Serological tests showed rising titres of antibody indicating type A infection during the spring and autumn of 1957 (the Asian epidemic), and during the recrudescence of Asian influenza which ended in April, 1958 (Table I). No cases of type B or C infection were detected; one case in 1956 showed rising titres of antibody to Sendai virus.

Four patients aged 28, 45, 54, and 61 years showed fourfold or greater increases in complement-fixing antibody to adenovirus; three were tested for neutralizing antibodies and showed increases to several types, but mainly to adenovirus types 2 and 7. The

TABLE I.—Results of Laboratory Tests for Influenza

Period	Cases Tested	Serologically Positive*	
		No.	%
November, 1956–February, 1957	102	0	0
March–May, 1957	27	4	15
July–August, 1957	5	0	0
September–October, 1957	18	14	78
November–December, 1957	10	2	20
January–February, 1958	42	19	45
March–April, 1958	48	14	29

* Fourfold or greater rising titre in C.F. or H.I. test with type A influenza.

corresponding illnesses were respectively fever and myalgia with headache and nasal blockage; fever and myalgia with pharyngitis; fever and myalgia with cough; and pharyngoconjunctivitis with nasal discharge.

So far as was possible, certain clinical features of cases selected for laboratory examination were recorded. Adequate records were available from 82 patients (50 male, 32 female; 69 aged between 21 and 60 years) seen during the Asian influenza season September–April, 1958. The findings, summarized in Table II, show a

TABLE II.—Clinical Features in 82 Patients During Asian Influenza Season

Clinical Feature	Serologically Positive		Serologically Negative	
	No.	%	No.	%
Headache	30	81	37	82
Sweating	30	81	36	80
Muscle pain	29	78	32	71
Dry cough	21	57	22	49
Pharyngitis	20	54	17	38
Productive cough	10	27	14	31
Nasal discharge	8	22	11	24
„ blockage	7	19	9	20
Vomiting	4	11	10	22
Total	37	100	45	100
Mean temperature when first seen	101.2° F. (38.4° C.)		101° F. (38.3° C.)	

remarkable similarity between the patterns of illness of 37 cases of proved type A influenza and 45 cases with negative laboratory findings, but it should be remembered that cases were selected for investigation on the basis of clinical similarity to influenza.

Cytopathogenic agents were isolated from 2 of 31 stools examined in HeLa tissue culture. An adenovirus was thus isolated from a 4-year-old boy with pharyngitis; an unidentified agent was isolated from an 11-year-old boy with tracheitis.

Records kept during the “second wave” of Asian influenza in January–April, 1958, showed that of 146 cases of influenzal illness only five gave a history of previous similar illness during the main epidemic in autumn, 1957. No laboratory data were available for three of these. Of the others, one showed serological evidence of influenza A infection, whereas the other gave negative results by serological examination and attempted virus isolation; no laboratory tests had been made during the first illnesses. No cases of clinical relapse were seen.

Observations continue with a view to following the behaviour of influenza during the second winter after appearance of the new Asian strains.

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