# Polymyalgia rheumatica in general practice

## A report of five cases

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POLYMYALGIA RHEUMATICA IS A WELL-DOCUMENTED illness and was first described by Bruce, a Scottish physician, in 1888. This article describes five cases diagnosed in one rural practice over a period of 28 months. The practice consists of 4,200 patients (of which 551 are over 65 years of age).

It was suggested by Paulley (1956) that the clinical picture of polymyalgia rheumatica was identical with the prodromal manifestations of temporal arteritis. This was confirmed by Alestig and Barr (1963) who demonstrated giant cells on biopsy of apparently normal temporal arteries in patients with this illness.

Consequently, polymyalgia rheumatica is a disease that should be sought and treated in general practice. On its own it can be a serious and incapacitating illness, but if it is not treated the likelihood is that it will ultimately proceed to temporal arteritis or even death.

## Clinical picture

The onset of polymyalgia is frequently abrupt and this was so in cases 2, 4 and 5 when it presented as a protracted influenza-like illness. According to Wilkes and Healey (1967) it affects women more often than men, and it is restricted to the 50-years-and-over age group. The patients can have a mild pyrexia (although none of these cases did). Undoubtedly, the predominant complaints are general malaise, weight loss, anorexia, muscle aches and depression. This depression is usually severe, the patients become apathetic and despondent and this can easily mask the true diagnosis. The muscle aches are chiefly confined to the pelvic and shoulder girdles. Stiffness of the lumbar spine for the first hour on rising is a common complaint. The erythrocyte sedimentation rate is always increased and often very much so. The serological tests for rheumatoid arthritis are negative. The response to steroids is dramatic and there is a transformation from a very sick person to an almost normal individual in a period of two or three weeks. Case 4 was confined to bed prior to taking steroids, yet he was out on his cycle at the end of two weeks treatment.

## Case reports

Cases 1 and 4 were extensively investigated, but the remaining three were diagnosed on the history, negative physical examination and raised ESR (Westergren). The negative physical examination is important and so are a normal mid-stream urine, chest x-ray and a negative RA test. These tests were done on all cases together with a haemoglobin and blood film. The dramatic response to steroids confirms the diagnoses (see table I).

Case 1. A 58-year-old man was seen in February 1966, he gave a five-month history of general malaise, depression and muscular pains in the regions of the shoulder and pelvic girdles. He had lost one stone in weight, but he was able to keep at work throughout his illness.

Additional investigations. W.B.C. 7,000/cml (normal differential), ASLT 300 units/ml. Acid phosphatase 1.2 units/100 ml, LE test negative, Bence Jones protein negative. Serum proteins and electrophoresis normal. Blood urea 32 mg/100 ml, Ba meal normal.

- Case 2. A 78-year-old male had a coronary thrombosis in 1962 and subsequently remained fit and active until February 1967. Then he complained of an influenza-like illness, general malaise, weight loss and shoulder girdle pains. He was depressed. The final diagnosis was not made until June 1967 when all his symptoms were more severe and he was confined to his house. At this stage he had pain and tenderness over the right temporal artery. Following treatment he remained fit and active till his death from a second coronary thrombosis in October 1968.
- Case 3. A 77-year-old woman first seen in January 1967 gave a history of general malaise, low

back pain and increasing depression over the previous three to four months. She remarked on stiffness of the lumbar spine for the first hour on rising. The diagnosis was not made until July 1967 when all her symptoms were much worse and she was unable to do her own housework. At this stage she complained of slight pain over both temporal arteries, but these were not tender.

Case 4. A 68-year-old man first seen in January 1968 complained of an influenza-like illness for the past two weeks. When next seen at the end of February 1968 his condition had rapidly deteriorated and he was confined to his bed, because of aching legs and stiffness of the lower half of his trunk. He had lost two stone in weight.

Additional investigations. X-ray skull, lumbar spine, pelvis and sacro-iliac joints showed osteo-arthritic changes only. Serum proteins normal, Bence Jones protein negative.

Case 5. A 70-year-old man was seen in February 1968 complaining of feeling excessively cold. Over the next three months he developed low back pain and stiffness of his shoulder-girdle muscles. He lost one-and-a-half stones in weight and changed from an active into a house-bound man.

Case no.	Age at onset	Sex	Hb percentage G/100 ml	Weight loss > 7 lbs	Initial E.S.R. mm fall first hour	Basic investigations*
1	58	M	11.5	yes	72	negative
2	78	M	14.2	yes	55	negative
3	77	F	14.0	yes	43	negative
4	68	M	11.1	yes	125	negative
5	70	M	10.7	yes	73	negative

TABLE I

# **Treatment**

The initial treatment was with betamethasone 0.5 mg three times daily. This dosage was given to all patients and in every case the response was dramatic. All except case 2, who remained fit and active until his sudden death, have continued in excellent health. No additional drugs such as acetylsalicyclic acid or phenylbutazone were found to be necessary. On average the dose of betamethasone needed was 0.5 mg tds for eight to ten weeks and then 0.5 mg twice daily for six to nine months. Following this a maintenance dose of 0.25 mg tds or

E.S.R. (mm. fall in first hour) Commenced Present dose of Case no. steroids at onset of after 2/52 February Betamethasone treatment treatment 1969 55 15 8 1 October 1966 Stopped February 1969 2 June 1967 55 22 Died October 1968 (0.25 mg bd at (October 1968) time of death) 9 3 July 1967 43 30 0.25 mg bd 4 February 1968 92 40 11 0.25 mg bd 5 June 1968 112 58 36 0.5 mg bd

TABLE II

<sup>\*</sup>Investigations: (1) Chest x-ray; (2) M.S.U.; (3) Blood film; (4) R.A. test.

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bd has been adequate. For the first year each patient had a monthly ESR done and after this once every three months (see table II).

#### Discussion

It would appear that polymyalgia rheumatica is a far more common illness than is generally realized. For example, six fresh cases of rheumatoid arthritis (none over the age of 60 years) and three new cases of gout were diagnosed in the practice in this same period. It was estimated by Dixon and others (1966) that the incidence of polymyalgia rheumatica was similar to that of gout in the general population and half as common as rheumatoid arthritis in people 70 years and over.

Case 4 demonstrates that it can be a fulminating illness. This man looked as if he had a rapidly developing cancer and I am sure that polymyalgia rheumatica can be a fatal disease, if not diagnosed and treated.

Case 1 is the only one that has so far been able to stop steroids and this after two and a half years treatment. It would appear that polymyalgia rheumatica is not a self-limiting disease of short duration as suggested by Bruce (1960), and that it does not resolve spontaneously.

In making the diagnosis, a raised ESR and weight loss were constant findings. Obviously these can only serve as valuable pointers when taken in conjunction with the history and symptoms such as muscular aches, anorexia, and depression, together with a negative physical examination, and negative investigations. However, it would appear that the only hope of not missing the diagnosis is to use the ESR as a screening test in all ill people in the 50-years-and-over age group. It cannot be stressed too much that the depression can be severe and that this symptom can easily mask the true diagnosis.

None of these cases subsequently developed joint changes and this would appear to rule out serologically negative rheumatoid arthritis.

Cases 2 and 3 were undoubtedly developing temporal arthritis, but the diagnosis in these patients could and should have been made earlier.

When the previously stated criteria of diagnosis are used the possibility of missing occult disease would appear to be slight.

# **Summary**

Five cases of polymyalgia rheumatica (four men and one woman) diagnosed in general practice over a 28-month period are described. All of the patients had a high ESR, muscular pains and weight loss. It is suggested that it can be a fulminating illness. Two of the cases with a four to five-month history appeared to be developing temporal arteritis. The importance of the ESR in making the diagnosis is stressed. All cases responded dramatically to steroids.

#### REFERENCES

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## **SYMPOSIUM**

# Abortion and euthanasia

The Exeter Division of the B.M.A. is holding an all-day symposium on abortion and euthanasia on Saturday, 1 November at Exeter University.

Speakers will include Sir John Peel, The Bishop of Exeter and Professors D. Russell Davis and G. Duncan Mitchell.

This symposium is recognized as two full sessions for the postgraduate training allowance and seniority payments by the Department of Health and Social Security.

All enquiries for admission tickets to the honorary secretary, Exeter Division, B.M.A., Rowhorne Cottage, Whitestone, Exeter EX4 2LQ.