

DEFINITION

1. **Polymyalgia rheumatica** is a condition which occurs predominately in patients over 60 years, in which there is prominent pain and stiffness in the shoulder and pelvic girdles associated with variable systemic symptoms and an elevated erythrocyte sedimentation rate (ESR).

CLINICAL MANIFESTATIONS

2. The onset is often dramatic, some patients giving the date of their first symptom, and in most the disease is fully developed within a month.
3. The source of pain and stiffness is usually localised to the muscles. There may be additional tenderness involving peri-articular structures such as bursae, tendons and joint capsules. The onset is commonly in the shoulder girdle, spreading to involve both shoulders, pelvic girdle and proximal muscles with striking symmetry. Involvement of distal muscles is unusual. Immobility is most severe on waking, a characteristic complaint being a need to roll out of bed, often with the aid of a spouse. Such morning stiffness may persist for hours, making the patient totally dependent.
4. An incidence of mild inflammatory polyarthritis varying from 0 to 100% has been recorded. Carpal tunnel syndrome is also an occasional accompaniment. Despite the prominent muscle symptoms, electromyographic studies and serum muscle enzyme values are normal and changes on muscle biopsy are non specific.
5. Most patients look unwell and complain of general malaise, fatigue and depression. Anorexia and weight loss can be striking, while night sweats and fever are frequent, occasionally being the presenting feature. Serum values of liver enzymes, alkaline phosphatase and gammaglutamyl transferase are elevated in most patients and can be correlated with the ESR and disease severity.
6. The most consistent abnormality is a raised ESR, often to over 100 mm/hour. Although untreated patients with a normal ESR do exist, an ESR of 40 mm/hour has a good diagnostic value. A mild hypochromic normocytic anaemia is common with a normal marrow and low plasma iron values. Iron therapy is ineffective, but the haemoglobin rises with disease control. Other cell counts are normal and there are no consistent changes in protein electrophoresis, immunoglobins or complement values.

AETIOLOGY

7. Although the commonest age group involved is that between 60 and 70 years and a diagnosis of this condition is made reluctantly in anyone less than 50 years, a third of patients are under 30 years.
8. The male:female ratio is 1:2. Although recorded in most races and populations, it has a peculiar predilection for those of Scandinavian descent.

9. It is possible that polymyalgia rheumatica includes several conditions, one of which is giant cell arteritis. A possible summer/winter peak has prompted an unrewarding search for infective causes. It has been postulated that psittacosis and hepatitis B may play a part in the cause of this condition but this has not been proven.
10. The disease's infrequency in spouses argues against environmental factors.
11. In those with proven arteritis, an immune destruction of the internal elastic lamina of the arteries is proposed and is supported by finding circulating immune complexes, together with immunoglobins, complement deposition and a mononuclear cell infiltrate adjacent to the lamina.
12. Familial aggregation and the aforementioned predilection for those of Scandinavian descent suggest the possibility of genetic factors. Despite many reports of tissue typing, no consistent pattern has emerged however.

CONCLUSION

13. **Polymyalgia rheumatica** is a rheumatic condition affecting mainly people over 60 years. Genetic and immunological factors have been implicated in the aetiology. Environmental factors have not been shown to play any part in the cause of this condition.

REFERENCES

Mowat A G. Polymyalgia Rheumatica and Giant Cell Arteritis. In: (Eds) Weatherall D J, Ledingham J G G and Warrell D A. Oxford Textbook of Medicine. 2nd Ed. 1987. Oxford. Oxford University Press. p51-52.

Hunder G. Polymyalgia Rheumatica and Giant Cell Arteritis. In: (Eds) Wyngaarden J B, Smith L H and Bennett J C. Cecil Textbook of Medicine. Philadelphia. W B Saunders Company. 19th Ed. 1992. p1544-1546.

December 1992