Polyarteritis Nodosa (PAN) is a vasculitis disease, which affects the small and medium-sized arteries. PAN commonly affects the skin, heart, kidneys and central nervous system.

Cause: There is no known cause of PAN.

Symptoms include fever, fatigue, weakness, loss of appetite, and weight loss. Muscle and joint aches are common. The skin may show rashes, swelling, ulcers, and lumps.
Other symptoms include abdominal pain and gastrointestinal bleeding (occasionally is mistaken for inflammatory bowel disease). Nerve involvement may cause sensory changes with numbness, pain, burning, and weakness. Central nervous system involvement may cause strokes or seizures. Kidney involvement can produce varying degrees of renal failure. Involvement of the arteries of the heart may cause a heart attack, heart failure, and inflammation of the sack around the heart (pericarditis).

There is **no specific test** to diagnosis PAN. **Diagnosis** is based upon physical examination, lab tests and biopsy of affected area. Most patients with PAN have elevated ESRs. Proteinuria (protein in the urine) is common among patients with kidney involvement.

The American College of Rheumatology 1990 criteria for the classification of Polyarteritis Nodosa

1. Weight loss of > 4 kg since beginning of illness
2. Livedo reticularis
3. Testicular pain or tenderness
4. Myalgias, weakness, or leg tenderness
5. Mononeuropathy or polyneuropathy
6. Development of hypertension
7. Elevated BUN or creatinine unrelated to dehydration or obstruction
8. Presence of hepatitis B surface antigen or antibody in serum
9. Arteriogram demonstrating aneurysms or occlusions of the visceral arteries
10. Biopsy of small or medium-sized artery containing granulocytes

Treatment will vary based on patient symptoms, disease activity, organ involvement and lab test results.

Treatment of PAN has improved dramatically in the past couple of decades. Before the availability of effective therapy, untreated PAN was usually fatal within weeks to months. Most deaths occurred as a result of kidney failure, heart or gastrointestinal complications. However, effective treatment is now available for PAN. After diagnosis, patients are treated with high doses of corticosteroids. Other immunosuppressive drugs are also added for patients who are especially ill. In most cases of PAN now, if diagnosed early enough the disease can be controlled, and often cured.

The newly proposed regimen for patients with PAN associated with hepatitis B, consists of 2 weeks of prednisone to control the vasculitis, followed by plasmapheresis to remove immune complexes, and accompanied by antiviral therapy with lamivudine to rid the patient of the hepatitis B infection. The long–term value of anti–viral therapy for polyarteritis nodosa associated with hepatitis C is not established.