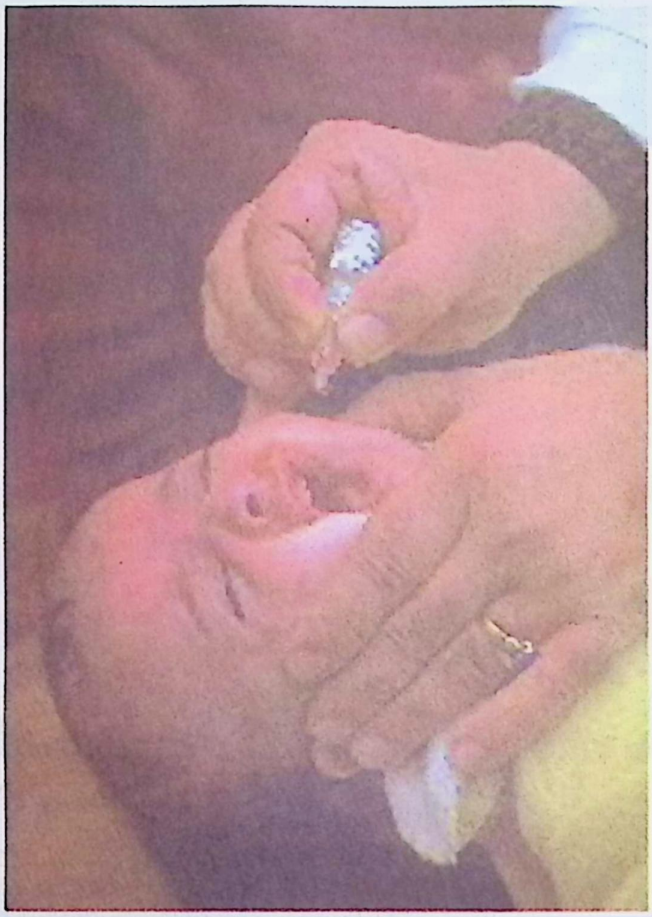
Polio Making a Comeback



Poliomyelitis is an "inflammation of the gray matter of the spinal cord. Polio is caused by a virus which results in an acute infection.

Where is polio found?

Before the availability of polio immunisation, polio was common worldwide. However, with strong immunisation programs and efforts to rid the world of polio, circulation of polio viruses is limited to a decreasing number of countries. The greatest risk is now in the Indian subcontinent and, to a lesser extent, in West and Central Africa.

How do people get polio?

The polio virus lives in the throat and intestinal tract of infected persons. The virus enters the body through the mouth, usually from hands contaminated with the stool of an infected person. Objects, such as eating utensils, can also spread the virus. Food and water are not thought to play a major role in the spread of polio.

What are the signs and symptoms of polio?

Polio is a viral illness that, in about 95% of cases, actually produces no symptoms at all (called asymptomatic polio). In the 4% to 8% of cases in which there are symptoms (called symptomatic polio), the illness appears in three forms:

- a mild form called abortive polio (most people with this form of polio may not even suspect they have it because their sickness is limited to mild flu-like symptoms such as mild upper respiratory infection, diarrhoea, fever, sore throat, and a general feeling of being ill)
- a more serious form associated with aseptic meningitis called nonparalytic polio (1% to 5% show neurological symptoms such as sensitivity to light and neck stiffness)
- a severe, debilitating form called paralytic polio (this occurs in 0.1% to 2% of cases)

People who have abortive polio or nonparalytic polio usually make a full recovery. However, paralytic polio, as its name implies, causes muscle paralysis - and can even result in death. In paralytic polio, the virus leaves the intestinal tract and enters the bloodstream, attacking the nerves (in abortive or asymptomatic polio, the virus usually just stays in the intestinal tract). The virus may affect the nerves governing the muscles in the limbs and the muscles necessary for breathing, causing respiratory difficulty and paralysis of the arms and legs.

How soon after exposure do symptoms appear?

Symptoms usually start 7 to 14 days after exposure to the virus. Infected persons are most contagious from a few days before to a few days after the start of symptoms. However, persons with polio can spread the infection for as long as the virus is in their throat or stool. The virus can be found in the throat for about 1 week after infection and in the stool for 6 weeks or longer.

How is polio diagnosed?

Polio is diagnosed by a blood test or culture.

Who is at risk for polio?

Polio is most common in infants and young children, but complications occur most often in older persons.

What complications can result from polio?

Complications include paralysis, most commonly of the legs. Paralysis of the muscles that control breathing and swallowing can be fatal.

In very rare cases, the oral vaccine used to prevent polio can cause polio paralysis in persons who are vaccinated (1 in every 8.1 million doses) and in people who are