

Week 5

## Case Study: Herpes Zoster (Shingles)

**Client Name:** Janet Hughes

**Age:** 68

**Gender:** Female

**Social Background:** Janet is a retired school teacher who lives alone. While she has always been very active in her community, recently she's been feeling more fatigued than usual, and her participation in local events has dropped. Janet also shares that she's been under more stress lately, dealing with some family matters, but she's trying to keep up with her daily activities.

**Medical History:** Janet has a history of hypertension, which she's been managing well with medication for the past 13 years. She also has type 2 diabetes, diagnosed about 6 years ago, and takes Metformin to control it. Janet remembers having chickenpox when she was younger, but there is no history of autoimmune diseases or other significant health issues.

**Chief Complaint:** Janet came in complaining of a painful rash on the right side of her chest. She describes the pain as a burning sensation that started a few days ago, followed by the appearance of small, fluid-filled blisters. The rash is mostly located on the side of her chest, along her ribcage. Janet also mentions feeling itchy in that area.

## Pathophysiology of Herpes Zoster (Shingles)

Herpes Zoster, also known as shingles, is caused by the reactivation of the **varicella-zoster virus (VZV)**. After an initial chickenpox infection, the virus lies dormant in the sensory nerve ganglia of the spinal cord or cranial nerves. As a person ages or their immune system weakens, the virus can reactivate, traveling along sensory nerves to the skin, causing the painful rash and blisters characteristic of shingles.

The virus remains dormant in the body after a chickenpox infection, and in many cases, it doesn't reactivate until years later. When it does reactivate, it