

Osteonecrosis, also known as avascular necrosis (AVN), aseptic necrosis or ischemic bone necrosis, is a disease resulting in the death of bone cells. If the process involves the bones near a joint, it often leads to collapse of the joint surface and subsequent arthritis due to an irregular joint surface. The exact cause is unknown. In the early stages of osteonecrosis, patients may not have any symptoms. As the disease progresses, however, most patients experience joint pain – at first, only when putting weight on the affected joint, and then even when resting. Pain usually develops gradually and may be mild or severe. If osteonecrosis progresses and the bone and surrounding joint surface collapse, pain may develop or increase dramatically. Pain may be severe enough to cause joint stiffness by limiting the range of motion in the affected joint. Disabling osteoarthritis may develop in the affected joint. The period of time between the first symptoms and loss of joint function is different for each patient, ranging from several months to more than a year. Osteonecrosis usually affects people between 30 and 50 years of age; about 10,000 to 20,000 people develop osteonecrosis each year in the United States. Osteonecrosis affects both men and women and affects people of all ages. It is most common among people in their thirties and forties. Depending on a person's risk factors and whether the underlying cause is trauma, it also can affect younger or older people.