

Bone DEEP

Your bones can get sick too - here's what can affect them and the symptoms to look out for.

BY RACHEL MCGREGOR

Feel it in your bones? Like the rest of the body, your bones can succumb to illness. Some bone diseases are fairly common, while others are relatively rare. We take a look at four of the more common bone diseases.

Bone cancer

→ **What is it?** This type of cancer occurs in the bone cells, and can be classified as primary or secondary. Primary bone cancer originates within the bone itself and is rare compared to secondary bone cancer, which is when the cancer originates elsewhere in the body and has spread to the bones.

The most common type of primary bone cancer is osteosarcoma, which begins in cells that are growing new tissue. It occurs most commonly in the knees, arms or pelvis, and often in people under the age of 30 - it's rare in middle age, and is more common in men. Chondrosarcoma, the second most common primary bone cancer, originates in the cartilage cells, so it can develop wherever there is cartilage in your body. It's a slow-growing cancer, though, so you're more likely to receive treatment before it spreads. Unlike osteosarcoma, the risk of chondrosarcoma increases with age, and it's equally prevalent in men and women.

→ **Symptoms** Pain in the affected area is the most common symptom, and will increase as the cancer progresses. The pain may be

accompanied by swelling around the site of the cancer. Detecting bone cancer is not easy and a biopsy is usually required to confirm the diagnosis.

→ **Treatment** This will be determined by the type of bone cancer you have, the stage of the cancer and your overall health. Treatment can involve surgery, chemotherapy, radiation or a combination of these.

Paget's disease

→ **What is it?** This disease can cause deformed or enlarged bones in your body, and can also cause bones to break down, which means that even though the bones may be dense, they're fragile. It can affect any bone, but the most commonly affected ones are the skull, spine, pelvis, lower legs and thighs. The disease affects men more than women, although the reasons for this are unknown. 'No one knows why males are more affected,' says Dr Steven Cunningham, an orthopaedic surgeon at Life The Glynnwood in Benoni, 'but this is certainly the case, with the common association being males over 50 years of age, of Anglo-Celtic descent, and with a family history.'

→ **Symptoms** Many patients experience no symptoms, or ones so mild they go unnoticed - they may even be confused with arthritis. These include pain or a warm feeling in the bone - usually the joints - for



IMAGE: GETTY IMAGES



no apparent reason. In the skull, a person may experience hearing loss and headaches; while in the spine, pinched nerves may result in tingling or numbness in the arms or legs.

→ **Treatment** If you don't exhibit any symptoms, you may not need treatment. However, if the disease is affecting high-risk sites in your body, such as your skull or spine, you will need treatment. Osteoporosis drugs (bisphosphonates) are usually prescribed in this case, but in rare cases, surgical intervention may be necessary.

Osteogenesis imperfecta

→ **What is it?** Also called 'glass bone' disease, this is a rare genetic disease that causes bones to fracture or break easily. 'Overall, the incidence of osteogenesis imperfecta (OI) is seven in every 100 000,' says Dr Cunningham. 'The known risk factors are almost all genetic – if parents have OI, there's a roughly 50 percent chance that their children will have it too.'

→ **Symptoms** These include fragile, brittle bones, weak joints and muscles, skeletal deformities and dental conditions due to brittle teeth. Sufferers may also experience hearing loss and scoliosis (curvature of the spine), as well as difficulty breathing, depending on the severity of the disease.

→ **Treatment** There's no known cure for OI. Rather, treatment includes managing the symptoms. People with OI are encouraged to exercise as much as possible to promote muscle and bone strength, which can help to prevent fractures. Swimming and water therapy are good options, as water allows independent movement with little risk of fracture. In some cases, surgery and physical therapy are necessary.

Osteoarthritis

→ **What is it?** The most common form of arthritis, osteoarthritis occurs when the protective cartilage on the ends of your bones deteriorates. It can show up in any joint in your body, but usually affects the neck, lower back, knees, hips and hands.

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It's a degenerative disease – meaning it worsens over time – and no cure exists. 'Osteoarthritis affects the vast majority of us,' says Dr Cunningham, 'and has, in some cases, a very strong association with inheritance (primary osteoarthritis), affecting women predominantly. Worldwide, the incidence of osteoarthritis is as high as about 35 percent, and often results in long-term pain and suffering. It's the main reason for joint replacement surgeries.'

→ **Symptoms** These include joint pain, stiffness, reduced flexibility, a grating sensation when you move your joint, and bone spurs (hard lumps of bone that may form around the joint).

→ **Treatment** Since no cure exists, the best course of action is to reduce pain and maintain joint movement. Your doctor will most likely prescribe medication to alleviate pain and reduce inflammation, and perhaps recommend physical therapy. In severe cases, surgery may be necessary. ■



HELPING HAND

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