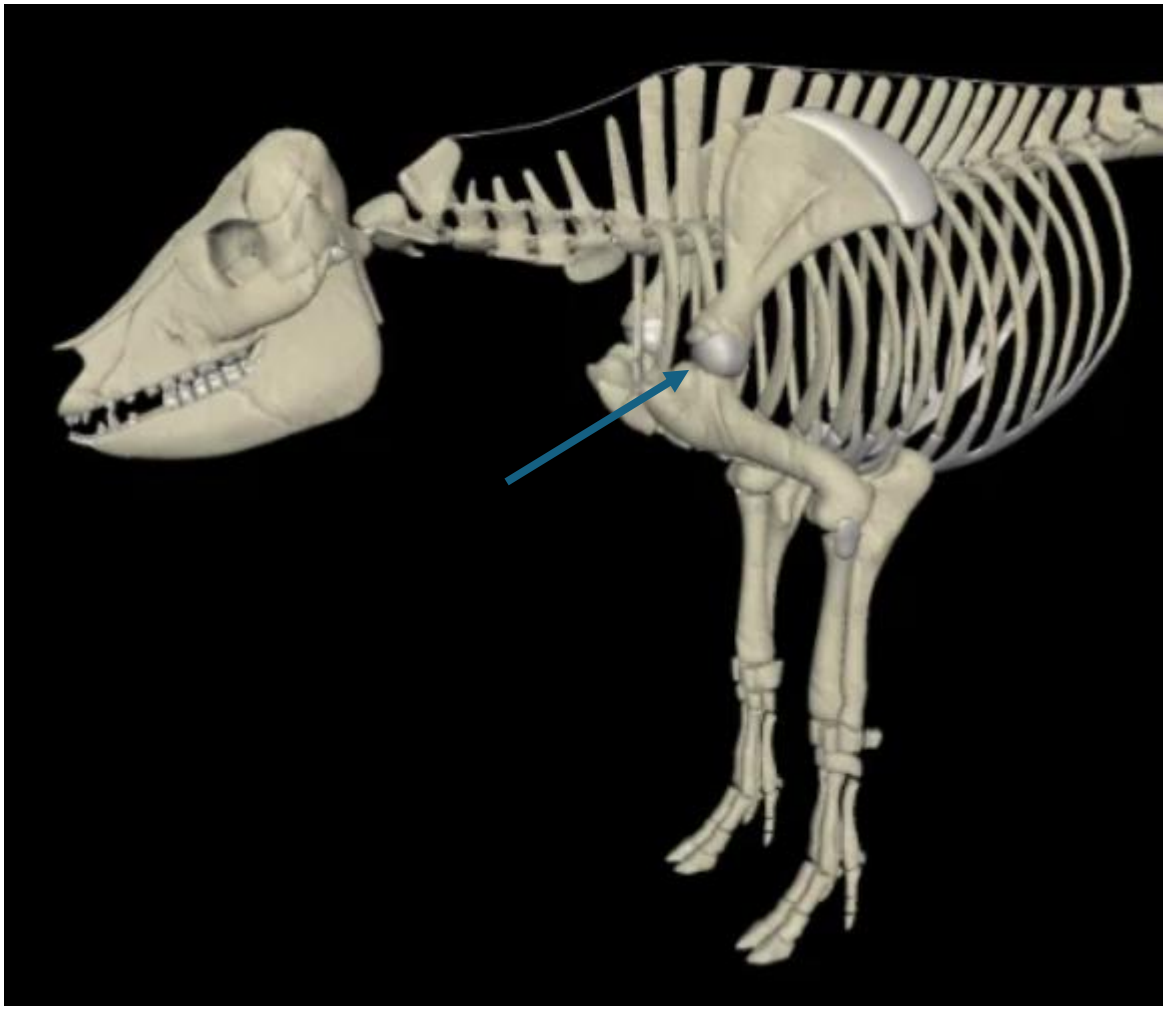
Condition: Shoulder lameness



Model of a pig skeleton

The shoulder joint is a ball and socket joint, with the socket of the end of the scapula (shoulder blade) resting on the ball at the top of the humerus (upper leg). There are various ligaments, tendons and muscle attachments that help keep the joint in place.

Symptoms: Limping, poor weight bearing on the front leg, and difficulty getting up after lying down.

In severe cases the Kunekune may have the appearance of a ‘frozen shoulder’ where it is reluctant to use its shoulder to move the front leg or take any weight on the leg.

While the condition may start initially due to an injury or a shoulder strain due to unusual exercise, it can progress to a chronic injury that gets worse with time, consistent with a chronic arthritis or degenerative joint disease.

Cause: The cause is thought to be damage to the shoulder joint due to stress or injury.

It is thought that being overweight during the age when larger bones are maturing or being overweight as an adult may contribute to the risk of developing shoulder problems.

Although there are various anecdotal reports of Kunekune pigs having shoulder problems, there doesn’t seem to be any research or published articles on this condition, so it is unknown if it is due to osteochondritis dissecans (damaged cartilage), ruptured ligaments or another cause.

When a Kunekune pig is noticeably lame it is advisable to seek veterinary treatment – as this condition can look similar to a fractured leg, and will often require pain relief and anti-inflammatory medication.

Occurrence: The Kunekune is the only breed of pig that seems to have this problem, so it is suspected that there is a genetic risk factor.

Anecdotally the Kunekune breed seems to be prone to problems with their shoulders, unlike other breeds of pigs or other livestock. With a compact body shape and relatively heavy shoulder conformation compared to the size of their front legs and feet, it is thought that the shoulder is one of the joints most likely to suffer issues with damage and ongoing arthritis or degenerative joint disease (osteoarthritis).

The true incidence of this problem is unknown, as it is not reported. Once the issue starts, it is unlikely to self-resolve, and in moderate to severe cases may cause ongoing issues and result in the pig being euthanised due to animal welfare concerns.

There are a number of contributing factors that may influence the occurrence of shoulder lameness in Kunekune pigs:

- A relatively small gene pool from when the Kunekune was 'saved from extinction' (approx. 50 pigs in the 1980's).
- Inbreeding leading to a higher frequency of genetic based problems.
- The compact stature and relatively heavy shoulder in relation to the size and conformation of the front legs.
- Obesity due to being overweight may predispose Kunekune pigs to shoulder problems.

Once a shoulder lameness issue occurs, chronic damage is likely to be irreversible and may cause ongoing pain and stiffness.

Anecdotal reports of cases where the Kunekune was a breeding pig indicated that the condition often didn't usually show up until the pig was around 4-6+ years old, by which stage it had already produced offspring that may carry a genetic predisposition for the development of the condition. It can occur in either sows or boars.

Recommendations:

1. Provide information on shoulder lameness to help Kunekune pig owners identify the condition.
2. Encourage Kunekune pig owners to manage the diet and exercise of their pigs to help prevent conditions related to obesity.
3. Provide information on identifying heritable problems, and raising the issue with Kunekune breeders of the risks of inbreeding (which can increase the frequency of genetic problems)
4. Identify affected individual Kunekunes and discourage breeding of that immediate bloodline.
5. Look at ways to promote research into the problem so that it is better understood.