What is osteopenia?

Osteopenia [os-tea-oh-pee-nee-ah] means thin bones. Osteopenia happens when a baby’s bones do not yet have enough minerals to make them strong. The most important minerals for bones are calcium and phosphorus.

What causes osteopenia?

Babies grow a lot during the last 3 months of pregnancy. During that time, they need large amounts of minerals for good bone growth.

But preterm babies are born before this growth is completed. As a result, their bones do not yet have enough minerals to make them strong.

What are the symptoms of osteopenia?

Most babies with osteopenia don’t have any symptoms. A few babies with severe osteopenia may have a fracture (broken bone). This can cause swelling and pain.

How common is osteopenia?

All preterm babies have some amount of osteopenia. This is because bones absorb the most minerals between 32 and 36 weeks’ gestation. Babies born after 36 weeks can also have osteopenia.

How is osteopenia measured?

X-rays are used to monitor the baby’s bone growth.
How is osteopenia treated in preterm babies?

Osteopenia is treated by giving the baby extra minerals. This can be done by:

- **Fortifying** breast milk by adding calcium and phosphorus
- Using formula designed for preterm infants

What are the complications of osteopenia?

Osteopenia can limit bone growth. The baby may also be at higher risk for broken bones. But these problems usually can be limited with treatment.

What will happen next?

Your baby will be treated for osteopenia. The health care team will monitor the baby’s bone health. When treated, osteopenia in newborns rarely causes long-term problems.

Talk to the health care team. They can answer any questions you have about your baby.

Glossary

**Fortifying** – strengthening  
**Fracture** – broken bone  
**Minerals** – substances needed to stay healthy. Examples of minerals are iron, calcium, and sodium  
**Osteopenia** – thin bones; in preterm babies, osteopenia happens because the bones have not had enough time to absorb all the minerals they need  
**Preterm** – born before 37 weeks’ gestation

Ask the health care team when you have questions—they are there to help.

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