

### The ministrations of sisters

Sisters provide notable examples of ministration. We read in Luke 8:2,3 of “certain women, which had been healed of evil spirits and infirmities, Mary called Magdalene, out of whom went seven devils, and Joanna the wife of Chuza Herod’s steward, and Susanna, and many others, which ministered unto him [Jesus] of their substance”. Joanna must have been a woman of high position, yet she ministered to the needs of the Master. These women followed Jesus from Galilee, which meant leaving their homes to minister to the Master, as we see from Matthew 27:55,56: “And many women were there beholding afar off, which followed Jesus from Galilee, ministering unto him: among which was Mary Magdalene, and Mary

the mother of James and Joses, and the mother of Zebedee’s children”.

Moreover these women stood by the Master when the apostles fled, and they were among the first to go to the tomb on the first day of the week. Truly with their sisterly intuition they believed in the resurrection of Jesus. In John 12:3 we read of that very costly act of love on the part of Mary in anointing the feet of Jesus with spikenard.

When we come to remember in the emblems the Master’s act of love in laying down his life for us, may we reciprocate his love in following the example of these faithful women and minister to the needs of one another, for Jesus said, “Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me” (Mt. 25:40).

## “Bone of my bones” \*

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**T**HE FRAMEWORK of the human body, “fearfully and wonderfully made”, is the skeleton of bones. They provide structure and strength, protect the internal organs and act as reservoirs for vital minerals, such as calcium. In Scripture, bone is a symbol of unity and strength.<sup>1</sup> Thus Adam declares of his newly created wife, “This is now bone of my bones and flesh of my flesh”; he would cleave to her, so that they would become one flesh (Gen. 2:23,24). Of Jesus it was decreed, “Not one of his bones shall be broken” (Jno. 19:36; Ex. 12:46), in contrast with David, who, following his sin with Bathsheba, speaks of his bones as having been broken (Ps. 51:8). The righteousness of the Saviour and our unity in him is represented by his unbroken frame, the sin and division of mankind by broken bones.

### Living organs

We tend to think of our bones, once they are fully grown, as fixed and solid like stone. But nothing could be further from the truth. Bones are in fact living organs containing blood vessels, nerve cells and living cells known as *osteocytes*.<sup>2</sup> Our bones are strong enough to support our weight, but light enough to allow free movement. They comprise a complex matrix of fibres of collagen interspersed with hard chains of the mineral calcium phosphate. Collagen itself is built from three-stranded protein chains, which form helical

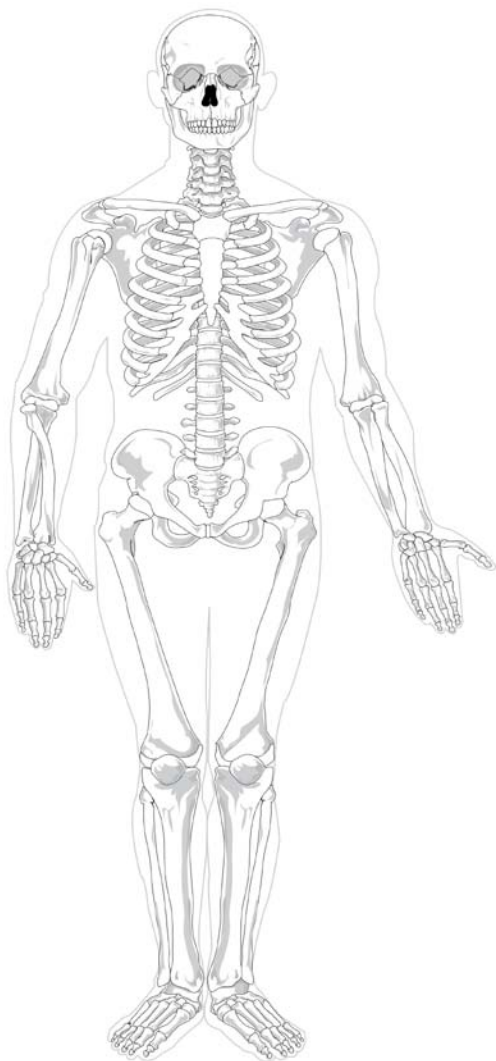
coils bound together to give great strength and elasticity.

The components of this remarkable composite material are secreted by the osteocytes embedded in the matrix. The skeleton of a newborn baby is made up of more than 300 parts, most of which are made of cartilage. Over time, most of this cartilage is converted into bone, in a marvellous process called ossification.<sup>3</sup> As the baby grows, some of its bones fuse together to form bigger bones, so that by adulthood the skeleton contains just 206 bones.

During childhood, long bones such as the femur (thigh bone) grow in length at either end in regions called growth plates. The cartilage cells divide and increase in number in these growth plates, and these new cartilage cells push older,

\* References from the NKJV.

1. As well as its straightforward translation as ‘bone’, the Hebrew *etsem* is also rendered ‘same’, ‘selfsame’ and ‘very’ to describe special days in the history and worship of the faithful. For example, the day Noah entered the Ark (Gen. 7:13), the day of Abraham’s circumcision (17:26), and the Passover (Ex. 12:17,41,51; cf. v. 46) are all described in the AV as ‘selfsame’ days, literally ‘bone’ days. In each case there is a separation from the world and a covenant with God.
2. *Oxford Concise Science Dictionary*, pp. 88,154.
3. BBC Science and Nature: Human Body and Mind—Bone growth; [www.bbc.co.uk/science](http://www.bbc.co.uk/science).



### Symmetry and complexity: the human skeleton.

larger cartilage cells towards the middle of the bone. Eventually these older cells die, and the space they occupied is replaced with bone. When the bone has reached its full size, its growth plates are converted into bone. Long bone growth comes to an end around the end of puberty.

Bone comes in two principal types, spongy and compact. Spongy bone is lightweight and made up of a mesh of needlelike pieces of bone with large spaces between them. Compact bone is dense and forms the outer layer of all the bones.

The shape of a bone reflects its role within the body:

- Long bones, like those in the arms and legs, are mostly made of compact bone

- Short bones, like the bones in the wrists and ankles, are composed mainly of spongy bone
- Flat bones, such as the rib and skull bones, are made of a layer of spongy bone sandwiched between two thin layers of compact bone
- Irregular bones, such as the butterfly-shaped vertebrae, have shapes designed for specific roles in the body.

Running along the centre of long bones, such as the femur, is a cavity filled with bone marrow. Red bone marrow is a soft tissue that produces blood cells, and yellow bone marrow is a store for fat.

### Growth control system

The extraordinary architecture of the skeleton is maintained by bone repair systems, controlled by hormones carried in the bloodstream.<sup>4</sup> The stresses of life produce bone damage, including microcracks, and these are constantly being repaired by special cells that migrate in and produce fresh bone.

Scientists are slowly unravelling some of the complex mechanisms at work in the body to control bone repair and growth. Hormones such as serotonin and oxytocin, normally associated with other functions in the body and brain, have been found to promote bone growth. It is becoming clear that the skeleton is not simply a supporting structure but is intimately connected functionally with many other organs in the body.

### A masterpiece of elastic strength

This brief survey of a part of the body we might have thought of as merely 'dead' scaffolding reveals once again the amazing complexity of every part of our bodies. The writer referenced in the section above concludes that "[Bone] is an engineering *masterpiece* of tensile, compressive and elastic strength", and another researcher adds, "We only wish we could mimic it".

Scientists in general attribute such marvels to evolution. Yet a 'masterpiece' is, by definition, the work of a Master! And the complex design and construction of the bony skeleton truly reveals the handiwork of the Creator. In the well-known passage which describes the body as being "fearfully and wonderfully made", the psalmist adds, "My frame [Heb. *otsem*, same root as *etsem*, bone]

4. Natalie Angier, "Bone, a Masterpiece of Elastic Strength", *New York Times*, SCIENCE, 28 Apr. 2009, kindly submitted by a reader.

was not hidden from You, when I was made in secret, and skilfully wrought in the lowest parts of the earth" (Ps. 139:14,15). The 'frame' of each one of us is likewise His workmanship.

Although current research is uncovering just a few of the complexities of bone and its growth,

the words of the Preacher in Ecclesiastes remain as true as ever: "As you do not know what is the way of the wind, or *how the bones grow in the womb of her who is with child*, so you do not know the works of God Who makes everything" (11:5).