Learning from human remains: Seianti's skeleton

Seianti's skeleton

Dr Bob Stoddart:

I'm Dr Bob Stoddart, I'm a senior lecturer in pathology in the University of Manchester. When Seianti came in I was asked to look at the skull. I think, at that stage, what was a matter of concern was that the age that had been ascribed to Seianti did not wholly match the features of the skull. And it then became apparent that there were indicators elsewhere on the skeleton.

I also tested the articulation of the bones against each other and could confidently assert that these were the bones of one individual. There were no superfluous bones and the skeleton was clearly female, a number of indicators of that. And clearly, too, the skeleton was that essentially of a middle aged lady, by our standards of today.

I came to the conclusion, looking at a number of variables, that she was probably in the age range of fifty to fifty-five at the time of death, that was the most probable range. She might have been a little earlier or a little later.

Her musculature was noticeably robust. Where you have strong musculature, it's reflected in the bones and in the processes on the bones to which the muscles were attached. It was very noticeable that her lower body was extremely robust. And particularly there was, if anything, slightly hypertrophy, those features of the bones that are related to the muscles, that pull the legs inward. Now that itself is suggestive of somebody who rode something. What she rode, I don't know.

You can get an indication of whether or not she's had children from the shape and angulation of the pelvis. Because at first pregnancy, the pelvis tends to tilt a little bit outward, and that's permanent. You can't reliably tell how many pregnancies she's had but it is highly likely that she's had at least one.

When you have childhood illnesses or illnesses later, before the end of growth, before the end of the adolescent growth spurt, then you see lines in the bone which were lines of arrested development. Now, in the case of Seianti, such lines are not frequent. That implies that while she'd had childhood illnesses, they hadn't been in any way out of the ordinary, even by modern standards, and she doesn't appear to have had any serious illness, or sustained illness, later in life.

There is evidence of a rather extraordinary injury to the right side of the pelvis. That is consistent with somebody who rode things, and the thing that was being ridden, whether it was an animal or some mechanical object, has rolled over onto the rider. The rider hasn't got out from underneath and the leg has been forced backward.

I would be quite reasonably confident in saying that she had a serious injury while riding something, probably at around about the age of sixteen, within a year or two of that. Certainly it was not an injury which occurred very much later.

Later in her life, she must have had a lot of pain. It's very clear that she would have become much less mobile, probably quite close to death. It's equally clear that she had kept up movement until a reasonably late stage, and that her bones were robust right to the end.

She has lost a good number of teeth, some of them quite recently before death. She's also lost teeth very much earlier. There's a distinct possibility that she may have knocked out

some teeth or at least have given them such a bang that they subsequently died and fell out. And if so, that's affected the shape of the jaw.

There's also ample evidence of poor dental hygiene, probably because she couldn't, anyway, get into her mouth to clean the affected the area. While her oral hygiene generally is not particularly good, in the area where there's been tooth loss, it's particularly bad and there's evidence that she'd got a dental abscess and possibly that abscess was draining, either into her mouth or possibly even through the side of her face. There would have been a little tiny hole oozing pus.

Her poor oral hygiene would have led to a number of characteristics on encountering her, of which I suspect the most obvious would be bad breath. She would certainly have been halitotic, and that, of course, may not have been particularly rare, but I think she would have stood out even among her contemporaries. She would probably have held her mouth slightly open and she would probably have had a tendency to grimace every now and then. However, she would, I think, not have been a totally repulsive person to meet. She would I think probably have been really quite an attractive individual in that she clearly had a certain degree of pain and difficulty in her life, and one suspects that her health had actually been quite good until relatively shortly before her death.

I can certainly tell how she didn't die. There's no evidence of violence whatsoever. There is no evidence anywhere of a metastatic tumour, so she's not had cancer which has then got everywhere in the skeleton. So a number of forms of cancer are unlikely. She's got no indication of long term systemic illness, such as anaemia. There is nothing really to suggest that she was other than somebody who either died suddenly from cardiovascular disease or was somebody who perhaps died from infection.

Because there are some bones missing from the skeleton, mostly little ones, of the hands and feet, the implication is that her skeletal remains were not put into the sarcophagus straight away, and there's certainly no evidence that she decayed in there, because there's no evidence of staining or organic material that's gone into the terracotta base.

It's extremely probable that the body was completely defleshed before she was entombed and that she may well have been entombed a considerable time, perhaps years, after she died. Immediately after death, it's possible and indeed, perhaps probable, that the body was opened, so that the body cavities were open to the air and that would speed up decay, it would also tend to avoid the risk of bloating and possible explosion.

It's likely that the body has then been disturbed over a period, and this may be something rather like certain burial practises that are seen in parts of Italy to this day, where the skeleton is first de-fleshed by burial, is then exhumed, powdered with volcanic earth, wrapped and placed in a chamber, in a stone chamber, and periodically is removed, dusted down again, cleaned up, put back, and the family may have a picnic.