

The Loss of a King: the correct identification of Skeleton 3 from Rushen Abbey

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Culture
VANNIN



There are pictures of human
skeletal remains within this
presentation



Skeleton 3



Osteobiography

An osteobiography is the use of scientific analysis to craft a story about the life and death of past people. Each osteobiography is a unique piece of research that sheds light on the identity of an individual during their life.

What makes up an osteobiography?

- Estimation of age
- Assessment of Sex
- Stature
- Evidence of Pathology/Disease

Biological Sex

Two areas are commonly used;

- The os coxae (pelvis)
- The skull

Here we can see;

- Narrow sciatic notches
- A straight sacrum





Recording our observations

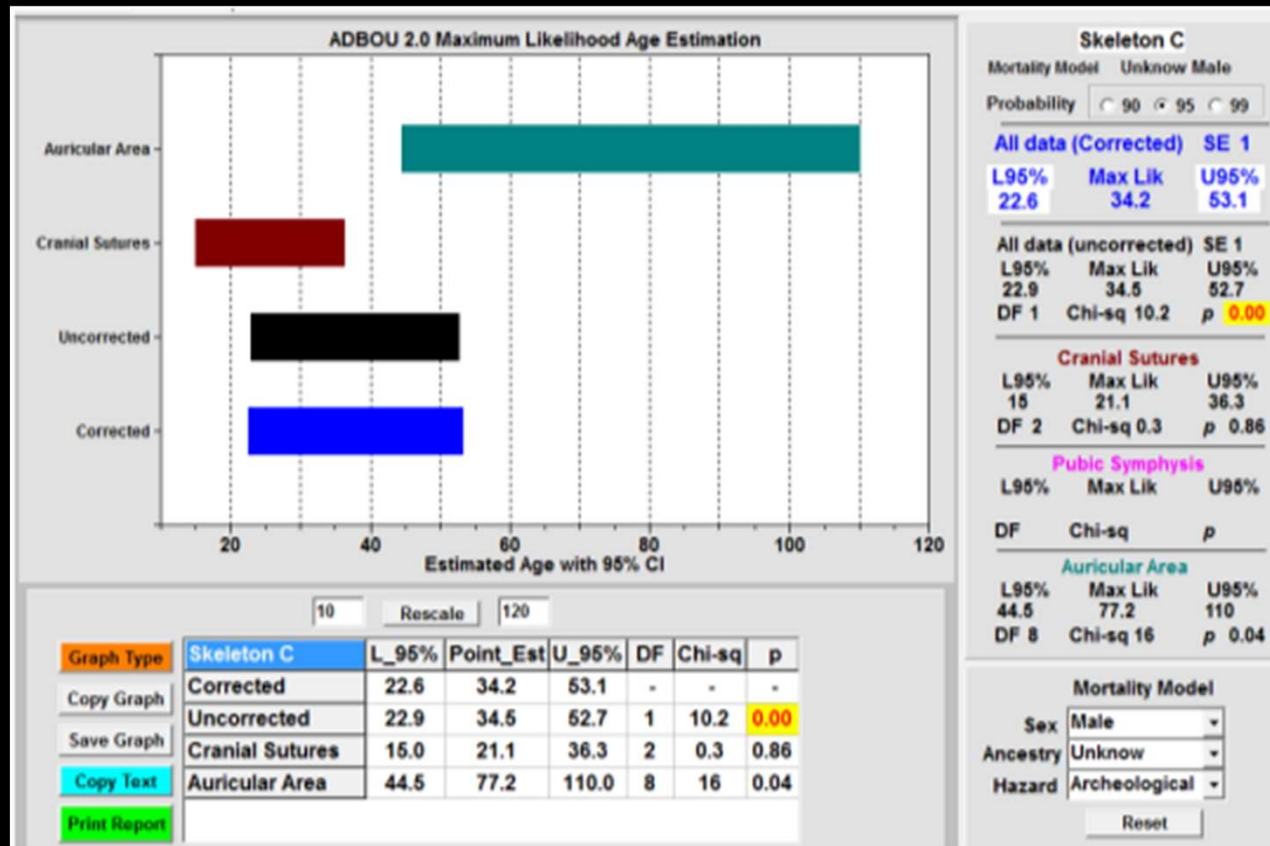
	Findings
Biological Sex	Male
Age Estimation	
Stature	
Evidence of Disease/Pathology	

Estimation of Age

- There is a difference between biological age and chronological age.
- There is a large amount of idiosyncratic variation in the ageing process



Bayesian Statistical Modelling, ADBOU



Recording our observations

	Findings
Biological Sex	Male
Age Estimation	34.2 years (22.6 – 53.1)
Stature	
Evidence of Disease/Pathology	

Estimation of Stature

Using a regression formula where these measurements are inputted

Stature is estimated at

163.91cm (+/- 2.99cm)

Or

5ft 3inches (+/- 1.18 inches)



Left femur measured at 45.2 cm



Left tibia measured at 31.8 cm

However, caution is needed

Normally, the spine contains

7 cervical

12 thoracic

5 lumbar

5 Sacral



Recording our observations

	Findings
Biological Sex	Male
Age Estimation	34.2 years (22.6 – 53.1)
Stature	163.91cm (+/-2.99cm)
Evidence of Disease/Pathology	Additional L6 vertebra

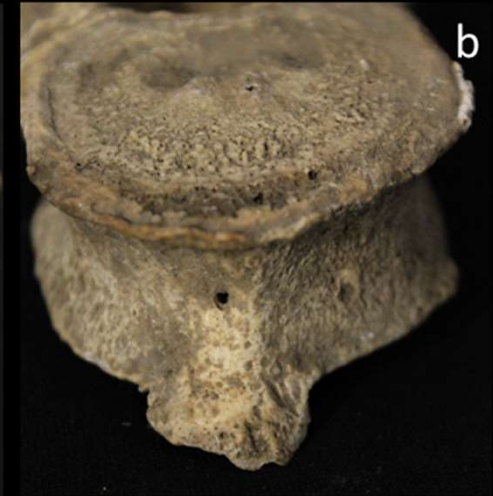
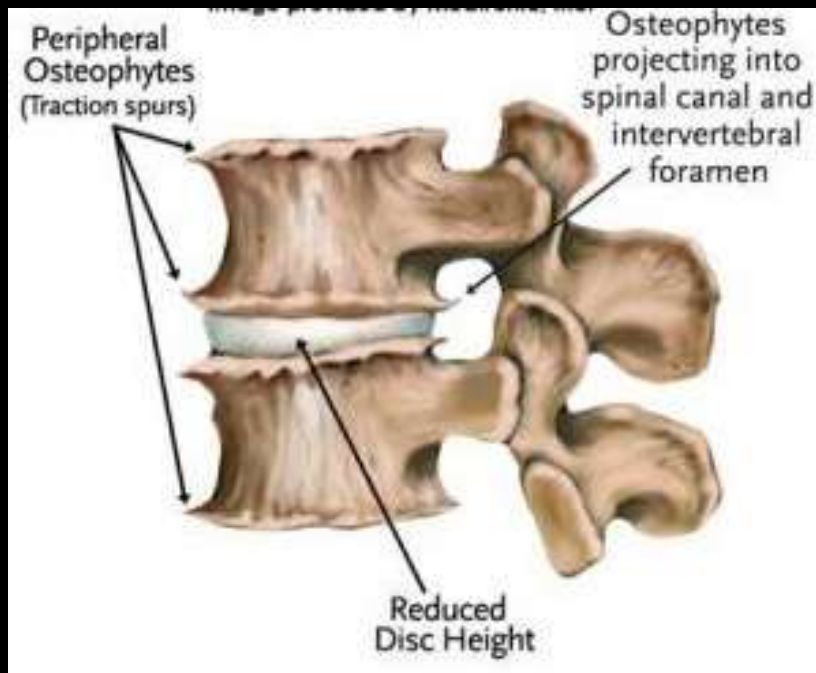
Muscle attachments



Poirier's Facets



Joint disease



Discolouration



Trauma

Left view of the thoracic vertebrae, showing the sharp force trauma to the thoracic processes from T4 to T10.

A closer view of the left lateral side of T5-T7 showing the smooth cut to the bone, note the same discolouration to the area



Trauma

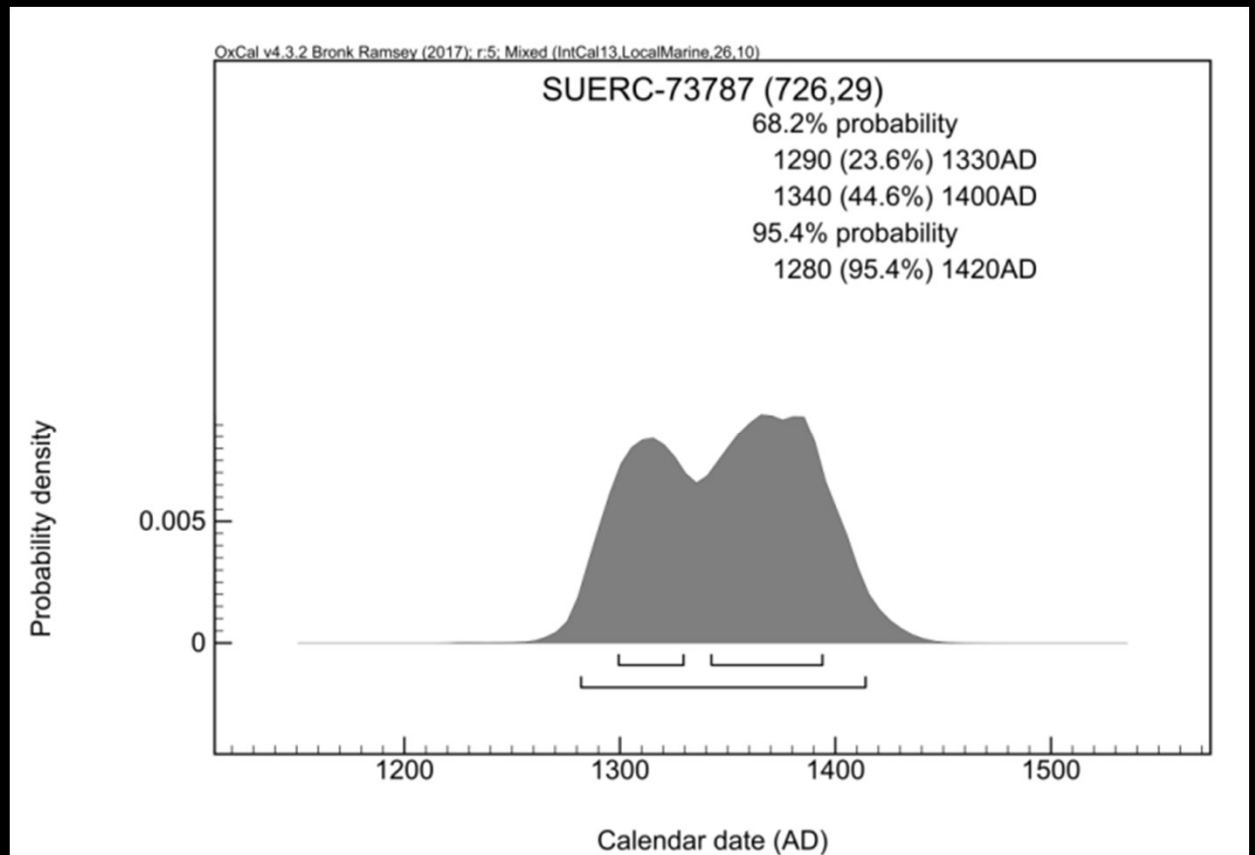
Posterior view of the right pelvic bone showing the rectangular penetrating lesion and the radiating fractures around it. Also note the bevelling on the anterior surface of the bone, suggesting the lesion was inflicted anterior to posterior.



Recording our observations

	Findings
Biological Sex	Male
Age Estimation	34.2 years (22.6 – 53.1)
Stature	163.91cm (+/-2.99cm)
Evidence of Disease/Pathology	<ul style="list-style-type: none">• Additional L6 vertebra• Prominent muscle attachments• Evidence of horse riding• Joint disease in the mid/lower back• Discolouration due to grave goods• Trauma to spine and pelvis

Radiocarbon (^{14}C) Dating



Recording our observations

	Findings
Biological Sex	Male
Age Estimation	34.2 years (22.6 – 53.1)
Stature	163.91cm (+/-2.99cm)
Evidence of Disease/Pathology	<ul style="list-style-type: none">• Additional L6 vertebra• Prominent muscle attachments• Evidence of horse riding• Joint disease in the mid/lower back• Discolouration due to grave goods• Trauma to spine and pelvis
¹⁴ C Date	AD 1280 - 1420

Comparing our observations

	Findings	Olaf II
Biological Sex	Male	Male
Age Estimation	34.2 years (22.6 – 53.1)	Died of old age
Stature	163.91cm (+/-2.99cm)	Unknown
Evidence of Disease/Pathology	<ul style="list-style-type: none"> • Additional L6 vertebra • Prominent muscle attachments • Evidence of horse riding • Joint disease in the mid/lower back • Discolouration due to grave goods • Trauma to spine and pelvis 	Unknown
¹⁴ C Date	AD 1280 - 1420	21 st May AD 1237

Conclusion

- The historical record from the *Chronicle of the Kings of Man and the Isles* states that King Olaf II died on the 21st May AD 1237 on St Patricks Isle and was buried at St Marys of Rushen.
- 14C analysis dated these remains to AD1280 -1420.
- In AD 1249 Reginald, son of Olaf II began reigning in Man on the 6th May. On the 30th Day of the same month, he was killed by the knights of Ivar and his men in a meadow near the church of the holy trinity in Rushen to the south of the same church. He was buried in ST Mary's Church in Rushen.