APPENDIX 3

PRELIMINARY REPORT ON HUMAN SKELETAL REMAINS FROM THE ARCHAEOLOGICAL SITES IN EL-SADDA

Łukasz Maurycy Stanaszek

The examined skeletons come from four chronologically and culturally different sites situated around the El-Sadda village: SD1, post-Meroitic; SD4, end of Kerma Horizon; SD24, Meroitic and post-Meroitic; SD34, Christian.

The age at death and/or sex of altogether 52 skeletons were determined during the 2005 and 2007 seasons. Three of the graves (SD1-G1; SD1-G4; SD1-T83) were empty, possibly because they were cenotaphs or had been robbed in the past. Site SD1 yielded 25 skeletons in the 2005 season and another 12 in 2007 (jointly 18 male, 16 female, three infant). Explorations in 2007 at three other sites gave the following results: site SD4: three skeletons (one male, two female); SD24: four skeletons (one male, one female, two infant); site SD34: eight skeletons (five male, two female, one infant). The table below presents the results for sexing, ageing and morphological characteristics of the individuals without giving the cultural context of particular graves.

A structure analysis by age and sex was possible only for individuals from the cemetery on site SD1, the low number of skeletons on the remaining sites making any comparisons statistically insignificant. As shown in the diagram [***Fig. 1***], the number of females in this group was slightly less (47.1%) than that of men. There is a distinctive absence of infant graves (only SD-T75); the two adolescent (*iuvenis*) individuals (SD1-T10; SD1-T78) should be assumed as having been treated as adults by their contemporaries (especially if they were young females). More than half the burials on this site represents mature and aged persons, the predominant category being adult males.

The long bones and crania of all adult individuals were measured using the Martin technique (Martin, Saller 1957; Trotter, Gleser 1952). Cranioscopic and nonmetric traits were also noted (Piasecki 1992; Buikstra, Ubelaker 1994). The results of the analysis were presented in a separate paper.

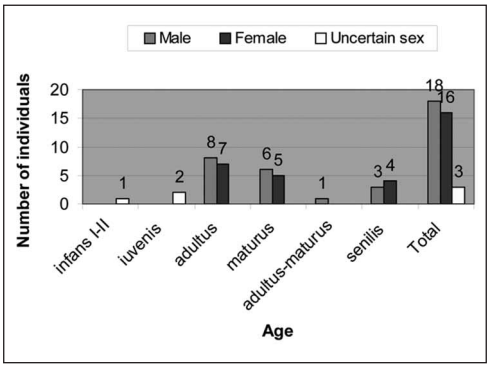

Fig. 1. Structure by age and sex of the human skeletal remains from El-Sadda 1

*Table 1. Sexing and aging of human skeletal remains from the El-Sadda sites excavated in seasons 2005 and 2007 (the latter marked with *), including more important morphological characteristics*

No.	Grave/Feature	Sex	Age	Comments, most important pathologies
1.	SD1-G1	?	?	Empty grave.
2.	SD1-G4	?	?	Empty grave.
3.	SD1-T1	F	*Adultus* (25–35)	Osteomas on frontal and both parietal bones.
4.	SD1-T2	F?	*Adultus* (20–25)	—
5.	SD1-T3	F?	*Senilis* (55–60)	Slight *cribra orbitalia*; degeneration of articular surfaces (whole skeleton); strong degenerative changes of right proximal epiphysis of femur (together with acetabulum of pelvis), as well as elbow joint of right upper limb (trochlear notch).
6.	SD1-T4	M	*Maturus* (35–45)	Strong tartar; paradentitis.
7.	SD1-T5	F?	*Maturus* (45–55)	Oval-shaped hollow (ø approx. 4 mm) on frontal bone (approx. 20 mm along the upper margin of the right orbit) — evidence of intravital, healed trauma; tartar; slightly expressed paradentitis; fistula around the tooth root in right $_2$M (mandible).
8.	SD1-T6	F?	*Adultus* (20–25)	Oval-shaped hole (ø 5 mm) in squamous part of occipital bone showing evidence of healing; below this, a second, flatter hollow (8×8 mm), reached to diploë and also healed.
9.	SD1-T9*	M	*Maturus* (35–45)	Slight tartar; *post mortem* fracture on left parietal bone (near squamosal border); intravital fracture near acromial end of right clavicle (healed, shortened and crookedly healed); intravital defects (tumor?) in two lumbar (L2–L3) and one thoracic (Th12) vertebral bodies.
10.	SD1-T10	?	*Iuvenis*	No data.

No.	Grave/Feature	Sex	Age	Comments, most important pathologies
11.	SD1-T11	M	*Maturus* (45–55)	*Post mortem* hole in right parietal bone (ø approx. 2 mm); slight paradentitis.
12.	SD1-T12*	F	*Maturus* (35–45)	Fistula around tooth root in left M^1 (maxilla); adhesion of sacrum and coccyx; slight osteophytes on edges of lumbar vertebral bodies.
13.	SD1-T13	F	*Maturus* (45–55)	Three concentric, transversal longitudinal fractures on frontal bone and both parietal bones (trauma — *causa mortis*?); oval-shaped hollow (20×26 mm) on sagittal suture (S2/S3) reached to diploë with slight evidence of healing (*ccausa mortis*?).
14.	SD1-T15*	F	*Adultus* (20–30)	Incomplete (partial) mummification (lower and upper limbs; curly hair preserved on cranium); strong facial prognathism; both humeri broken *post mortem* (by robbers?).
15.	SD1-T17*	M	*Maturus* (40–45)	Agminate incisors (mandible); slight osteophytes on edges of lumbar vertebral bodies.
16.	SD1-T18	F?	*Senilis* (55–65)	—
17.	SD1-T28	F	*Adultus* (30–35)	Slight *cribra orbitalia.*
18.	SD1-T33	F?	*Adultus* (25–35)	Strongly expressed *cribra orbitalia*; hollow on squamous part of occipital bone (11× 9 mm) — evidence of healed trauma; longitudinal bone eminence (approx.36 mm long) near *pars verticalis* sagittal suture.
19.	SD1-T37*	F	*Maturus* (40–50)	Preserved remains of soft tissues; obliteration of dental alveoli of mandible (left M_1–M_3) and maxilla (right I^1–I^2); abnormal position of canine teeth in maxilla; degenerative changes of distal hand and foot phalanges; intravital defects in lumbar and thoracic vertebral bodies (tumor?); deformation of articular surfaces of vertebral bodies (porosity, osteophytes); slight deformation of sternal ends of ribs.

No.	Grave/Feature	Sex	Age	Comments, most important pathologies
20.	SD1-T39*	F	*Senilis* (approx. 55)	Diastema (maxilla); obliteration of dental alveoli of mandible (right $_2$M–$_3$M and left M_1, M_3) and maxilla (right ^{2}M, ^{3}M and left M^2, M^3); inflammatory process of parodontium in maxilla (right M^2–M^3); osteophytes on edges of vertebral bodies (especially *C* and *L*); flattening of lumbar vertebral bodies; deformation of articular surfaces and porosity of cervical vertebral bodies (*C*V–*C*VI coalesced); great number of bony eminences and infiltrations near articular surfaces on whole skeleton (e.g. femur, patella).
21.	SD1-T44*	M	*Maturus* (35–45)	Fistulas around teeth roots on right ^{1}I–^{2}I (maxilla); slight osteophytical changes on cervical and lumbar vertebral bodies; slight flattening of vertebral bodies; degenerative changes near auricular surfaces of ilium (right bone slightly coalesced with sacrum); degenerative changes of distal foot phalanges; degeneration of sternal end of the first, left rib (ossified cartilaginous part of rib).
22.	SD1-T47	F	*Adultus* (20–25)	Oval-shaped hollow (26×33 mm) in the middle of frontal bone (bony margin approx. 6 mm; healed and not reaching *lamina interna* — incomplete trepanation?); second hole (ø approx. 37 mm) on the right side of frontal bone (destroyed *post mortem*, obliteration on borders — complete trepanation?); internal side of cranium (right side of frontal bone and right parietal bone) — porous surface of *lamina interna*.
23.	SD1-T48	M?	*Adultus* (45–55)	—
24.	SD1-T58	F	*Maturus* (20–30)	—
25.	SD1-T59*	M	*Senilis* (approx. 55)	Evidence of healed, intravital injuries (animal tooth marks, probably crocodile) located by elbow joint of right upper limb (distal epiphysis of humerus and proximal epiphysis of ulna); degenerative changes within phalanges of both hands; osteophytes on edges of lumbar vertebral bodies; degeneration of articular surfaces of cervical vertebral bodies and both patella.

No.	Grave/Feature	Sex	Age	Comments, most important pathologies
26.	SD1-T61	M	*Adultus* (30–35)	—
27.	SD1-T62	M	*Adultus* (25–35)	—
28.	SD1-T63*	M	*Adultus* (20–30)	Slight tartar.
29.	SD1-T67*	M	*Senilis* (55–60)	Oval-shaped hollow (4×4 mm; 1 mm deep) on right side of frontal bone — evidence of healed trauma; fistulas around teeth roots in left M^1 (maxilla) and right $_2M$ (mandible); obliteration of dental alveoli of maxilla (left M^2–M^3, right ^1C) and mandible (left I_1); paradentitis; spaces between teeth; slightly expressed osteophytes on edges of vertebral bodies.
30.	SD1-T69	M	*Adultus* (25–35)	—
31.	SD1-T75	?	*Infans* I–II	No data.
32.	SD1-T76	M	*Maturus* (35–45)	—
33.	SD1-T77	M	*Adultus* (25–35)	—
34.	SD1-T78	?	*Iuvenis*	No data.
35.	SD1-T79	F	*Senilis* (approx. 55)	Osteoma on frontal bone (7×7 mm); strong deformation and degenerative changes of all articular surfaces (bony infiltrations, irregularities).
36.	SD1-T80	M?	*Adultus–Maturus*	—
37.	SD1-T81 + SD1-T81(?)	M	*Adultus* (25–35)	—
38.	SD1-T82	M	*Senilis* (55–65)	Reduced alveolar process.
39.	SD1-T83	?	?	Empty grave.
40.	SD1-T85*	M	*Adultus* (25–35)	Archimorfic cranium; intravital fracture of right zygomatic bone (healed, but badly coalesced); traces of grave robbery (pieces of the same lumbar vertebra found in the grave and outside, differing in color due to post-depositional factors); sacrum coalesced with coccyx; slightly expressed changes (bony infiltration) near connection with left auricular surface of ilium and sacrum.

No.	Grave/Feature	Sex	Age	Comments, most important pathologies
41.	SD4-T1*	M	*Adultus* (20-30)	—
42.	SD4-T2, G.1*	M	*Maturus* (40-50)	Slight *cribra orbitalia*; osteophytes on edges of lumbar vertebral bodies; flatten-ing of vertebral bodies; degenerative changes of distal hand phalanges. (rheumatism)
43.	SD4-T2, G.2*	F	*Adultus* (20–25)	Hole (26×23 mm) with poorly healed edges in squamous part of occipital bone and right parietal bone (near middle of lambdoid suture).
44.	SD24-T2*	?	*Infans* II (approx. 10)	Delicate skeleton suggestive of female.
45.	SD24-T4*	M	*Iuvenis/Adultus* (18–20)	—
46.	SD24-T6*	?	*Infans* I (approx. 3)	—
47.	SD24-T13*	F	*Adultus/Maturus* (approx. 35)	Strong tartar; slight flattening of lumbar and thoracic vertebral bodies; not very strongly expressed degenerative changes of hand phalanges (rheumatism)
48.	SD34-G1*	F	*Maturus* (35–45)	Dental caries and fistula around tooth root near right $_1$M (mandible); obliteration of dental alveoli of mandible (left M_2–M_3) and maxilla (left M^1–M^3 and right ^{2}M–^{3}M); paradentitis; strong tartar; concentric fracture in the center of right parietal bone (trauma — *casusa mortis*?); slightly expressed osteophytes on edges of vertebral bodies.
49.	SD34-G2*	M	*Adultus* (30–35)	Paradentitis; sacral bone coalesced with coccyx; sternum-manubrium coalesced with body.
50.	SD34-G3*	F	*Maturus* (35–40)	Quite strong tartar; dental caries on left M_2 (mandible); obliteration of dental alveolus of mandible (right $_2$P).
51.	SD34-G5*	M	*Adultus* (20–25)	Preserved fragments of skin and soft tissues.
52.	SD34-G10*	?	*Infans* I (2–3)	—
53.	SD34-G11*	M	*Iuvenis/Adultus* (approx. 20)	Slight *cribra orbitalia* (in one orbit only).

No.	Grave/Feature	Sex	Age	Comments, most important pathologies
54.	SD34-G23*	M	*Maturus* (45–55)	Supine, tibiae crossed; strongly expressed osteophytes on edges of lumbar vertebral bodies; flattening of vertebral bodies (changes due to overwork).
55.	SD34-G25*	M	*Maturus* (35–45)	Fistula around tooth root near left P_1 (mandible); dental caries on left M_3 (mandible); obliteration of dental alveoli of mandible (I_1–I_2) and maxilla (M^1–M^3, ^{1}M–^{3}M); paradentitis; slightly expressed osteophytes on edges of lumbar vertebral bodies.

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