Enclosures of death in the Early Iron Age: the necropolis of Esfola (Beja, Portugal)

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ABSTRACT – *This article focuses on the study of the Early Iron Age necropolis of Esfola, taking into account the burial rituals of the site (the architecture, the funerary objects and the human skeletal analyses are dealt with in the context of 'burial ritual' studies). This research will contribute to the body of knowledge on Early Iron Age necropolises with enclosures, typical of the Beja and Ourique regions in southern Portugal,* i.e. *Vinha das Caliças 4, Monte do Bolor 1–2, Cinco Réis 8, Carlota and Palhais. All these sites identified in the southern Iberian Peninsula allow us to characterize the funerary rituals practised in this region during the Early Iron Age.*

KEY WORDS – *southern Iberian Peninsula; funerary rituals; bioanthropology; grave goods; prestige items*

Ograde smrti v starejši železni dobi: nekropola Esfola (Beja, Portugalska)

IZVLEČEK – *V članku se osredotočamo na študijo nekropole Esfola iz časa starejše železne dobe, pri tem razpravljamo o pogrebnih obredih na najdišču (kot so arhitektura, grobni pridatki in analize človeških kosti, ki so obravnavani v kontekstu študij 'pogrebnih obredov'). Raziskava bo prispevala k poznavanju starejših železnodobnih nekropol z ogradami, ki so značilne za regiji Beja in Ourique na jugu Portugalske, kot so Vinha das Caliças 4, Monte do Bolor 1–2, Cinco Réis 8, Carlota in Palhais. Vsa omenjena najdišča iz območja južnega Iberskega polotoka nam omogočajo prepoznati pogrebne obrede, ki so se izvajali v tej regiji v času starejše železne dobe.*

KLJUČNE BESEDE – *južni Iberski polotok; pogrebni obredi; bioantropologija; grobni pridatki; prestižni predmeti*

Introduction

The archaeological site of Esfola (ESFO'15) was excavated in 2015, encompassing archaeological works to minimize impacts on cultural heritage during the implementation of the São Matias Hydraulic Circuit connected with the Cegonha Reservoir. The field work covered a total area of 351.02m^2 and took place under the supervision of the archaeologists Gina Dias, Ricardo Santos and Linda Melo. A long diachrony was identified from the Early Iron Age (7th and 6th centuries BC) to the Modern Period (*Melo* et al. *in press*). This work will focus on the funerary rituals (architecture, body position, orientation and grave goods) biological profile, paleodemography and paleopathological conditions. Anthropolo-

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gical studies of Portuguese necropolises of the Early Iron Age are scarce. One of the few exceptions is the one of Vinha das Caliças 4 (*Pelicano 2016*), which allowed some comparisons to be made.

Fig. 1. Necropolises of Early Iron Age in Beja region:* 1 *Palhais 1;* 2 *Fareleira 2;* 3 *Fareleira 3;* 4 *Poço da Gontinha 1;* 5 *Poço Novo 1;* 6 *Vinha das Caliças 4;* 7 *Carlota;* 8 *Pisões;* 9 *Monte do Bolor 1–2;* 10 *Cinco Reis 8;* 11 *Quinta do Estácio 6;* 12 *Montinhos 6;* 13 *Monte da Lage;* 14 *Esfola.

Background of EIA necropolises

The known of funerary world of the Early Iron Age (EIA) in the Beja region started in the 1940s with the necropolis of Quintos (Herdade das Carretas), near the town of Beja (Abel Viana, 1945). During the 1970s and 1980s, Caetano de Mello Beirão and his team worked in Ourique region on several EIA necropolises; for instance, A-do-Mealha-Nova and Herdade do Pego (*Dias* et al. *1970*), Chada and Fonte Santa (*Beirão 1986*), and Favela Nova (*Dias, Coelho 1983*). In the 1990s, José Morais Arnaud (*1993*) worked on the necropolis of Nora Velha 2. Rui M. Soares and Artur Martins (*2013*) recently published some new data on burial practices there. Manuel and Maria Maia (*1996*) carried out several archaeological works at the site of Neves Corvo, near the city of Castro Verde. It is also important to include the necropolis of Corte Margarida, excavated by Artur Martins (*1999*) and studied a few years later by Manuela de Deus and José Correia (*2005*). However, most of the discoveries have been made in the last 15 years, due to a large number of archaeological excavations related to the construction and implementation of the Alqueva Irrigation Network. These allowed for a veritable 'revolution' in the existing knowledge of the prehistory of the region (*Mataloto, Boaventura 2009*). The fieldwork uncovered several EIA necropolises and highlighted the great heterogeneity in burial rituals, which contrasted with the previously understood reality of cremation necropolises in the Ourique region.

These newly recorded and excavated necropolises in the region around Beja form the so-called 'Núcleo de Beja', which also chronologically coincides with the 'Núcleo de Ourique', and are very important because of the similarities with Esfola. Among the known funerary sites on the right bank of the Guadiana River (Fig. 1) are Palhais, Beringel (*Santos* et al. *2010; 2017; Valério* et al. *2013*); Fareleira 2 and 3, and Poço da Gontinha 1 (Peroguarda, Ferreira do Alentejo), and Poço Novo 1, Pedrogão (*Figueiredo, Mataloto 2009*); Vinha das Caliças 4, Trigaches, São Brissos (*Arruda* et al. *2017*); Carlota, São Brissos (*Salvador Mateos, Pereira 2017; 2010*); Pisões, Beja (*Bargão, Fernandes 2017*); Monte do Bolor 1–2, Trigaches, São Brissos (*Soares* et al. *2017; Valério* et al. *2017*); Cinco Réis 8, Santiago Maior (*Salvador Mateos, Pereira 2017*); Quinta do Estácio 6, Nossa Senhora das Neves (*Pereiro* et al. *2017*). Along the left bank of the Guadiana, a grave at Montinhos 6 and another at Monte da Lage, both near the town of Serpa, are known (*Soares* et al. *2017*).

The Necropolis of Esfola: enclosures and graves

Since only a small part of this necropolis was excavated (351.02m²), it is not possible to quantify what was unearthed. Nevertheless, two enclosures with an orthogonal plan were identified and fully excavated. A third was identified but not fully excavated. A fourth was also identified, but unfortunately not excavated, as it was located outside the construction limits (*Melo* et al. *in press*). Enclosure 1 (UE 1164) that was identified in survey 11, formed by four

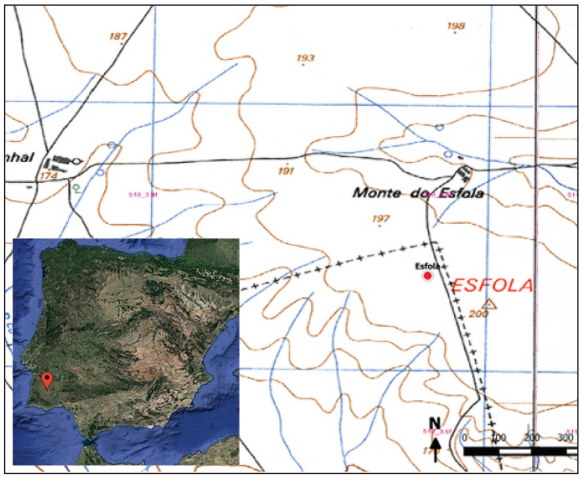

Fig. 2. Location of Beja and the archaeological site in the military letter 511-1/25 000.

straight ditches, has a sub-quadrangular plan with a central grave (grave 9). It is a pit with a rectangular plan, where an individual was buried (skeleton 9 – SU I09). In the peripheral area of the enclosure 1, other graves were recorded: grave 8, located in a ditch, while graves 10, 11, 12, 13, and 14 were located outside of, but associated with the enclosure (Fig. 3).

Enclosure 2 (UE 732), identified in survey 7, has a sub-rectangular plan, also with a central pit grave (grave 4, skeleton 4, SU I04;). In one of the ditches another grave (grave 7) was also recorded (Fig. 3).

All enclosures and graves were opened in the geologic substrate. Most grave pits, characterized by their rectangular plan, are narrow and shallow. Four graves, 7, 8, 11, and 14 reveal a stone 'cuirass' that would have probably served as a cover. Grave 4, in addition to the cover, also has a 'bed' and a side wall made of large stones. This grave appears to be an exception, since no other grave in this necropolis has evidence of these characteristics. Grave 10 had the same type of large stone elements, but only on the grave walls. Each grave represented a single primary burial; however, signs of perturbations were noted in the form of upturned stone blocks, as well as some bones.

Material and methods

In addition to the data that were registered during field work, all human remains were analysed in the laboratory. The human remains were poorly preserved, and comprised nine skeletons: two non-adults and seven adults. The latter include four males, two females and three skeletons of unknown sex (Tab. 1). The age at death of non-adults was obtained through the dental development and eruption patterns using the methodology of Shatha J. AlQahtani *et al.* (*2010*). For the adults, the external end of the clavicle was used to assess age at death based on the method introduced by Sue M. MacLaughlin (*1990*). Sex determination was based on pelvic morphology (*Bruzek* et al. *2005*), and diameter of the femur head, according to the Wasterlain's (*2000*) methodology and by the dimensions of calcaneus and talus, using Silva's (*1995*) approach.

Morphological dental traits were scored following the ASUDAS protocol (*Scott, Irish 2017; Turner* et al. *1991*), including an examination of the hypotrophic root of upper central incisors (*Cunha* et al. *2015*) and the mandibular molar pit tubercle (MMPT; *Marado, Silva 2016*). Cranial traits such as metopic suture or foramina parietal were scored according to Hauser's and De Stefano's (*1989*) method. Postcranial traits, such as septal aperture and third trochan-

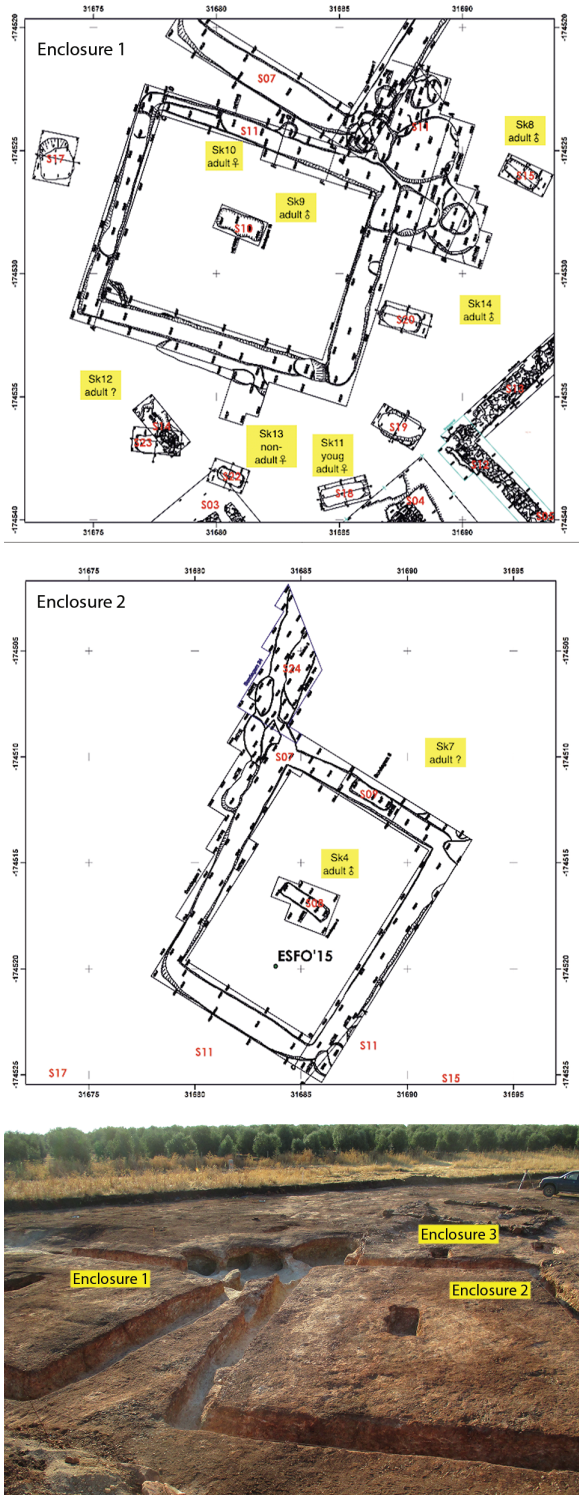

Fig. 3. **A, B *archaeological drawing of Enclosures 1 and 2 with the central and peripherical grave;* C *picture of the Enclosures 1, 2 and 3 with central graves from necropolis of Esfola adapted from Melo* et al. *(*in press*).***

ter, among others, were scored following the methods outlined by Michael Finnegan (*1978*) and Shelley R. Saunders (*1977*).

Tooth wear was recorded according to Holly B. Smith (*1984;* adapted from *Silva 1996*), unusual wear according to Petra Molnar (*1972*), chipping and notching according to Benedetta Bonfiglioli *et al.* (*2004*), and grooving and slanting according to Dave Grant (*2010*).

Enclosure	Skeleton	Orientation	Deposition	Age at death	Sex	Method
2	4	NO-SE	LLD	Adult	M	*Bruzek 2002; Murail 2005; MacLaughlin 1990*
2	7	NO-SE	LLD	Adult	I	–
1	8	NO-SE	RLD	Adult	M	*Silva 1995*
1	9	NO-SE	RLD	Adult	M	–
1	10	NO-SE	RLD	Adult	F	*Bruzek 2002; Murail 2005*
1	11	NO-SE	LLD	±16 years	F	*Alqahtani* et al. *2010*
1	12	NO-SE	RLD	Adult	I	–
1	13	NO-SE	RLD	±8 years	I	*Alqahtani* et al. *2010*
1	14	NO-SE	LLD	Adult	M	*Bruzek 2002; Murail 2005;*

Tab. 1. Summary of the data obtained from the skeletons of Esfola necropolis. Left lateral decubitus (LLD); Rigth lateral decubitus (RLD).

All human remains were carefully examined for pathological lesions. Cariogenic and calculus lesions were the most common, and they were recorded according to Lukacs' (*1989*), and Martin's and Saller's (*1956*) methodologies. The same was done with bones, where the most common pathologies were degenerative diseases. For articular diseases such as arthrosis (*Assis 2007*), and for non-articular changes in enthesis Henderson's *et al.* (*2013*) methodology was used.

Results

As for the spatial disposition of the Esfola necropolis, the central burials in both excavated areas were adult males. In the ditched area, the burials were adult males, adult and young females, and non-adults. All bodies were deposited directly on the floor of the grave above the geological substrate. The bodies lay in a similar position, lateral decubitus (right – 5 skeletons; left – 4 skeletons), with the upper and lower limbs half flexed and aligned Northwest-Southeast (Tab. 1). It should be emphasized that all skeletons had archaeological grave goods, except skeleton 13 (non-adult). The data obtained for dental morphological features and non-metric features of the skeleton are presented in Tables 2 and 3.

With regard to the oral pathological lesions, 3.9% (n=6/153) of teeth, belonging to four individuals, displayed cariogenic lesions. All these cariogenic lesions, mostly small and medium sized, were located at the interproximal level of the posterior teeth. The mean dental wear was 1.8% (n=153). Dental calculus was noted in 18.3% of the teeth (n=28/153), in small or medium deposits. The linear enamel hypoplasia (LEH) were identified in 9.1% (n=14/153) of teeth, including upper and lower canines. Finally, 3.2% of teeth (n=5/153) were lost *antemortem*, all belonging to the anterior teeth of skeleton 8 (adult male). This individual also displayed hypercementosis in teeth 17 and 27, corresponding to 1.3% (n= 2/153) of the sample.

Dental traits	FDI	Frequency %
Shoveling	11;21	83% (5/6)
(+=ASU 3-6)	12;22	75% (6/8)
Labial convexity	11;21	60% (3/5)
(+=ASU 2-4)	41;31	0% (0/2)
Hypotrophic roots (-)	11;21	50% (2/4)
(*Cunha* et al. *2015*)	21;22	0% (0/6)
Interruption grooves (-)	11;21	0% (0/6)
	12;22	71% (5/7)
Tuberculum dentale	11;21	50% (3/6)
(+=ASU 2-6)	12;22	37% (3/8)
	13;23	30%(3/10)
Metacone/ C_3	16;26	100% (5/5)
(+=ASU 3-5)	17;27	100% (8/8)
	18;28	90% (9/10)
Hypocone/ C_4	16;26	100% (5/5)
(+= ASU 3-5)	17;27	87% (7/8)
Metaconule/ C_5	16;26	0%(0/4)
(+=ASU 1-5)	17;27	0%(0/6)
	18;28	40%(4/10)
Enamel extensions (-)	16;26	0% (0/5)
	17;27	14% (1/7)
	18;28	0% (0/8)
	46;36	0% (0/7)
	47;37	0% (0/8)
	48;38	0% (0/2)
Lower Premolar Cusp	44;34	100% (8/8)
Number (+=ASU 3-5)	45;35	100%(7/7)
Protostylid	46;36	40% (2/5)
(+=ASU 1-6)	47;37	0% (0/8)
	48;38	0%(0/4)
Mandibular molar pit	46;36	40% (2/5)
tubercle (*Marado, Silva 2016*)	47;37	0% (0/8)
	48;38	0%(0/4)
Lower Molar Groove	46;36	100% (5/5)
Pattern (+=ASU Y)	47;37	100% (7/8)
	48;38	25% (1/4)

Tab. 2. Dental traits from the skeletons of Esfola necropolis.

Other dental alterations were observed (Tab. 3 – Supplementary material) including chipping, slanting, and notching. Chipping was identified in 11.5% (n=3/26) of upper teeth, all belonging to skeleton 14 (Fig. 4.A). Slanting was noted in 17.6% (n=3/17) of upper anterior teeth and in 10% (n=1/10) of lower anterior teeth, all belonging to skeleton 10. Notching was only observed in tooth 31 (1/10) of skeleton 10 (Fig. 4.B), and grooving was not observed. The oral observations of these individuals are summarized in Table 4.

Pathological lesions were noted which corresponded to infections, degenerative (articular and non-articular), neoplastic, and unknown etiologies in five adult skeletons from this necropolis. These pathological lesions are summarized in Table 5.

Concerning the pathological lesions were only observed exostoses in two skeletons. Skeleton 10: in the proximal region of the right tibia, with 15mm x 8.5mm (Fig. 5.A) and in the acromial end of the right clavicle measuring 3mm x 1.5mm (Fig. 5.B). Skeleton 11, scored around the external *auditory meatus* in both temporal bones with similar dimensions (3.9mm x 2.5mm) (Fig. 6).

In the left acetabulum of male skeleton 14, a small perforation (around 8mm in diameter) was observed (Fig. 7). The edges of this hole show signs of remodelling. Signs of remodelled infections were also scored for the right foot bones of this skeleton.

Grave goods

Only one handmade carinated vessel was found, with skeleton 10, and it was completed but quite fragmented. With skeletons 4 (Enclosure 2), 8, 9, and 14 (Enclosure 1) a total of six iron spears were identified. In addition, an iron dagger was recovered with skeleton 4. From graves 7 and 12, two Tartessian belt-buckles of type 4A (*Cerdeño 1981*) were identified with the active and passive parts.

The only specimen of fibula recovered in the graves of the Esfola was a fibula of Ponte 8a (fibula of Alcores type) (*Ponte 2006*). The second is a complete bronze fibula of the Ponte 9 type (Acebuchal fibula), subtype Ponte 9/a1 (*Ponte 2006*). It has a simple, full-back, semi-circular section laminar profile. The foot is long, with a caudal appendix with a button. The shape is triangular and the spring is bilateral, symmetrical, with an inner rope to the arch that consists of 18 turns. The axis is independent and has the following dimensions: 60mm x 15mm. A fragmented fibula was recovered in survey 11 [1100] of Enclosure 1, but unfortunately out of its original context.

A remarkable set of ornaments was recovered with skeleton 11. A pair of complete bracelets with two ovoid finishes and a depression in the centre giving them a heart shape (bracelets *acorazonados*). Two rounded and simple metal bracelets, one bronze al-

Cranial traits	**Frequency %**
Hauser and De Stefano (*1989*)	
Foramina parietal (skull)	25% (1/4)
Metopic suture (skull)	25% (1/4)
Post-cranial traits	
Finnegan and Saunders (*1978*)	**Frequency %**
Septal *aperture (humerus)*	20% (1/5)
3rd Trochanter (femur)	0% 0/5)
Patella emarginata	0% 0/5)
Morphology of the subtalar facets (*astragalus*)	Divided - 0% (0/6)
Absence of anterior facet of *calcaneus*	0% (0/6)

Tab. 3. Cranial and post-cranial non metric traits from the skeletons exhumed from Esfola Necropolis.

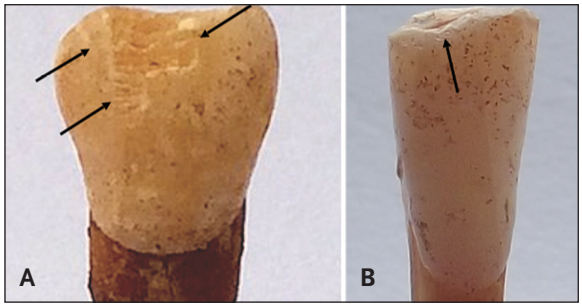

Fig. 4.* A *labial view of tooth 23 with chipping-grade 3 (Sk.14, adult male);* B *labial view of tooth 31 with notching-grade 1 (Sk.10, adult female).

Enclosure	Skeleton	Caries	Calculus	AM	LEH	Chipping	Slanting	Notching	Grooving
2	4	no	no	no	X	no	no	no	no
	7	no	no	no	no	no	no	no	no
1	8	X	X	X	X	no	no	no	no
	9	X	No	no	no	no	no	no	no
	10	no	X	no	X	no	X	X	no
	11	X	no	no	X	no	no	no	no
	12	no	no	no	no	no	no	no	no
	13	no	no	no	no	no	no	no	no
	14	X	X	no	X	X	no	no	no

Tab. 4. Summary of oral conditions of individuals from Esfola.

Fig.5.* A *anterior and posterior views of the proximal part of the right tibia showing a bone exostosis;* B *anterior view of acromial end of the right clavicle both from skeleton 10 (adult female) from Esfola.

loy ring and one metal alloy ring. Several beads (150) were also present near the neck, some were monochromatic (with black and transparent tones) and decorated with buds for 'eyes', and others were polychromatic (presented black and white tones) with a zigzag/serpentiform decoration. This type of polychromatic bead was also recovered with skeleton 12. Some recovered beads were made from glassy paste (in white, black and transparent glass) with segments with stratified eyes. A few of the beads found were made of seashells (6) and animal teeth (2). It is quite interesting that the items found in Esfola clearly attest to the Mediterranean influence on the community that used the necropolis (*Valério* et al. *in press*).

Fig.6. Exostoses observed around the left external* auditory meatus *of skeleton 11 (young adult female) from Esfola. This lesion displays bilateral expression.

Discussion

In recent years, due to the construction and implementation of the Alqueva Irrigation System, a large number of funerary necropolises have been discovered. The so-called 'Núcleo de Beja' shows some uniformity in burial practices and rituals, but in comparison with the 'nucleus of Ourique' there are some differences due to the presence of ritual cremation cysts.

The human remains exhumed at Esfola are very fragmented and poorly preserved. A total of nine skeletons were identified from both sites: four male, two female, and three of unknown sex. All but two individuals, an eight-year-old and an adolescent of about 16 years, were adults. The sample of the necropolis of Vinha das Caliças 4 is larger. It has a total of 53 skeletons: 15 adult females, 13 adult males, 18 adults of undetermined sex, and seven non-adults (*Pelicano 2016*). However, both necropolises were not fully excavated, and thus a more comprehensive understanding of these archaeological sites is not possible.

Concerning atypical dental wear patterns, the majority of alterations observed in the upper and lower anterior teeth of these individuals were chipping and slanting (*Molnar* et al. *2011*). The patterns of chipping in anterior teeth could be suggestive of the use of teeth in daily activities, such as weaving, while in the posterior teeth chipping could be explained by the ingestion of hard or not well-cooked food (*Bonfiglioli* et al. *2004*). In the individuals recovered from this necropolis, chipping was located on the upper anterior dentition of skeleton 14 (an adult male). A similar pattern was observed but in a different period, in the Bronze Age in individuals from the ne-

Fig.7. Small perforation observed in the left acetabulum of skeleton 14 (adult male) from Esfola.

Skeleton	Pathologies
Ind. 4 ♂	Signs of remodeled infection in the lower limb bones (particularly tibiae).
Ind. 8 ♂	Low grade articular lesion in the articulation of the right shoulder/elbow, left knee and left tarsal bones. Circular osteoma ('button' osteoma) with 7mm diameter in the occipital bone.
Ind. 10 ♀	Low articular lesion in the temporomandibular point, entheseal change of grade 1 in the solear pit of the right tibia. Exostoses in proximal region of the diaphysis of the right tibia (15mm x 5mm). Exostoses in the acromial end of the right clavicle (3mm x 1.5mm).
Ind. 11 ♀	Exostoses in the external auditory meatus in both temporal bones with similar dimensions (3.9mm x 2.5mm).
Ind. 14 ♂	Entheseal change of pectoralis major and supracondilar crest of the right humerus, tibial tuberosity and distal part of the left tibia. Hole with 8mm diameter in the left acetabulum displaying remodeled edges. Signs of remodeled infection in the bones of the right foot.

Tab. 5. Identified pathologies in the skeletons unearthed of Esfola necropolis.

cropolis of Casas Velhas in Melides (Portugal). Here chipping was recorded in five anterior and two posterior teeth, corresponding to three individuals (two males and one of unknown sex) according to Ana M. Silva *et al.* (*2016*). Chipping was also found in the Middle Bronze Age hypogea of the archaeological site of Torre Velha 3, but only on the anterior teeth of two female adult individuals (*Fidalgo* et al. *2020*). It is possible that the atypical wear in both Esfola and Casas Velhas is due to abrasive food ingestion and the use of teeth in daily activities, while at Torre Velha 3 it could just be due to the use of teeth in daily activities. However, more study is needed, especially on the EIA necropolises, to better understand these parameters.

Among the observed pathological lesions, the bone exostoses observed in the lateral part of the right tibia of skeleton 10 could represent a case of *Myositis ossificans*. This alteration may occur in response to calcification of a hematoma caused by a trauma (*Campillo 1993*). In skeletons exhumed from Portuguese EIA necropolises no similar cases have been reported, probably because there are only few publications for EIA. However, a case was identified in the necropolis of Angorilla (Spain), in the right humerus of a young adult male (skeleton 553; *López Flores 2014*).

In skeleton 11 it is possible to observe an exostosis in the external *auditory meatus* in both temporal bones. Clinical investigations call it 'surfer's ear', which is an inflammation caused by the frequent contact with water, especially cold water, in the auditory canal (*Lorentz 2020*). Several Iron Age activities could result in these alterations, such as swimming, fishing, or exploring water recourses (*Villote* et al. *2014*).

With regard to the spatial disposition of Esfola, some authors propose that the distribution of the graves could possibly represent familial relationships based on the exploration of territory (*Figueiredo, Mataloto 2017*) or between the individual burials in the same enclosure (*Aubet* et al. *1996*). Forthcoming DNA studies may help to test this theory. Some bone samples from Esfola were submitted to Harvard University to be analysed by David Reich and his team, and the same has been done in the necropolis of Vinha das Caliças by Breslin (PhD thesis in preparation).

In Esfola, as in Vinha das Caliças 4, the importance of the symbolic and decorative objects such as chain beads, rings and bracelets offered by the living to the dead is striking. The effects of looting are visible in the majority of the tombs, especially in the thoracic region of the skeletons, where the most valuable objects were located. Some authors call this 'surgical looting' (*Figueiredo, Mataloto 2017*).

Some grave goods appeared to be distributed based on the sex of the individual, with men being associated with weapons and females with adornment and pottery.

The grave goods recovered from skeleton 11 (Enclosure 1), are particularly rich and diverse (see Table 1); including two bracelets, *acorazonados*, also identified in the necropolises of Vinha das Caliças 4 (*Arruda* et al. *2017*) and Monte do Bolor 1–2 (*Soares* et al. *2017*). Other recovered grave goods include two rounded and simple metal bracelets, one bronze ring, and a necklace with more than 150 glass beads (polychromatic beads in black and white tones, black glass bead with cross sections and two animal teeth and six cowrie shells). Bracelets are well documented in Portuguese territory, and specifically in the region of Beja (*Mataloto 2015*), as is witnessed in Vinha das Caliças 4 (*Arruda* et al. *2017*), Monte do Bolor 1–2 (*Soares* et al. *2017*), Quinta do Estácio 6 (*Pereiro* et al. *2017*), and in Monument VI of Monte-do-

Mealha Nova in Ourique (*Dias* et al. *1970*). These bracelets are also associated with female individuals in Angorrilha, Sevilla (*Ferrer Albeda, Bandera Romero 2014*).

Fibula appeared in the graves of male skeletons 4 (Enclosure 2) and 14 (Enclosure 1). The first corresponds to a complete fibula of the Ponte 8a type – fibula of the Alcores type (*Ponte 2006*). The second is a complete bronze fibula of the Ponte 9 type – acebuchal fibula, subtype Ponte 9/a1 (*Ponte 2006*). This type of fibula parallels in the necropolis of Olival do Senhor dos Mártires in Alcácer do Sal (*Ponte 1985*). In other necropolises of Beja, fibulae seem to be more associated with male burials (*Figueiredo, Mataloto 2017*), as in Vinha das Caliças 4 (*Arruda* et al. *2017*). However, they also appear to be associated with females, as the fragment recovered in the grave of skeleton 10 of Esfola necropolis suggests. It was not possible to identify any relationship between belt-buckles and sex at Esfola because they were recovered from male, female, and unknown sex graves. Despite this, some scholars have pointed out that the pieces of 'Tartesic type' are closely related to female skeletons (*Almagro-Gorbea* et al. *2008*), and this was also observed in similar necropolises of the Beja region (*Figueiredo, Mataloto 2017*), such as Vinha das Caliças 4 (*Arruda* et al. *2017*).

A very fragmented iron knife was identified next to skeleton 4 (Enclosure 2), buried in the left lateral decubitus and facing this skeleton. This is a common object and also has parallels in the aforementioned necropolises of Vinha das Caliças 4 (*Arruda* et al. *2017*) and Monte do Bolor 1–2 (*Soares* et al. *2017*) in the region of Beja.

With skeleton 4 (Enclosure 2) and skeletons 8, 9, and 14 (Enclosure 1), a total of four iron spears were identified, including in dorsal or ventral positions in burials, as in other necropolises in the region of Beja. However, with skeleton 14 two spears appeared positioned differently, crossed over the lower limbs.

Final remarks

The Beja region was part of the so-called orientalization process in the 7th and 6th centuries BC. This region has provided deep archaeological insights in the last 15 years, and today it is possible to understand a little more about the great diversity of funerary gestures during this period, contrary to what was previously thought. Indeed, not only is the existence of necropolises of cremation known, but also of inhumation, and sometimes both in the same necropolis.

Skeletons	Grave goods
4	1 spear, 1 knife, 1 *fibulae*
7	1 belt-buckle
8	1 spear
9	2 spears
10	1 vessel, 1 ring, 1 *fibulae*
11	2 bracelets '*acorazonados*', 2 metal bracelets, 1 bronze ring, necklace-beads (>150, 2 animal teeth, 6 cowrie shells)
12	1 belt-buckle
13	–
14	1 bronze *fibulae,* 2 spears

Tab. 6. Skeletons and grave goods of Esfola Necropolis.

The necropolis of Esfola, similar to the others identified in the 'Núcleo de Beja', shows great investment of the living in relation to the dead. This is evidenced by the monumental features of the necropolises, the dimensions of the enclosures, and also the large number and quality of the funerary objects. Similarities in the orientation of the skeletons, the position of the upper and lower limbs and the grave goods can also be observed (Tab. 6).

Although Esfola has not yet been fully excavated, the current discoveries fall within the scope of funerary anthropology and paleobiological research in the region. Only nine individuals were exhumed in this necropolis, with more males than females. Some social distinctions based on sex may be present, as the men had weapons and the women had grave goods of jewellery and pottery. In addition, it is also possible to deduce something about the life of these communities in terms of health status and pathological diseases associated with possible activities of these Early Iron Age individuals who died in the region of Beja.

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