

TAPHONOMY AND BURIAL CONTEXT OF THE ROMAN/POST-ROMAN FUNERARY AREAS (2ND TO 6TH CENTURIES AD) OF A LANZADA, NW SPAIN

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Abstract:

Although in the post-Roman transition (Late Antiquity) intense socioeconomic, cultural and environmental changes took place in NW Iberia, their impact in the life of local communities is barely known. The funerary rites and burial are processes deeply rooted in societies, hence their modifications may reveal helpful aspects to understand the aforementioned transition. To reach this objective and improve our knowledge on the local lifestyle, I analyzed and compared the taphonomy, or post-mortem alterations, of burials from A Lanzada necropolis. This is one of the few sites in NW Spain where two different funerary phases, Roman and post-Roman, have been found. The burial context was studied in 59 graves (38 Roman and 21 post-Roman) and surface abrasion and biotic-abiotic alterations were analyzed in 84 skeletons (38 Roman, 40 post-Roman, 6 undetermined). The results showed modifications on burial ritual in the Late Antiquity funerary area: grave orientation changed to W-E (it was S-N in Roman times), no grave goods were present, body position was always supine, and multiple consecutive burials and stone slabs coffins were introduced. This type of funerary context was apparently common in later Galician necropoleis. In contrast, in the Roman period the funerary practices were more varied, since they included burial cremations, tile-built graves, as well as prone burials with carelessly deposited human remains. Other Iberian sites show similar patterns of changes between Roman/post-Roman phases. A possible standardization of funerary ritual in Late Antiquity is suggested and different socioeconomic and cultural causes are explored to understand the observed trends.

Keywords: Late Antiquity, funerary practices, grave orientation, multiple consecutive burial, prone burial, grave good, canid tooth marks.

Resumen:

Tafonomía y contexto funerario en la necrópolis romana/tardoantigua (siglos II-VI dC.) de A Lanzada, NO de España.

Durante la transición desde el periodo romano a la tardoantigüedad se condensaron, en el Noroeste de la Península Ibérica, intensos cambios socioeconómicos, culturales y ambientales. Sin embargo, conocemos muy poco sobre si tuvieron un impacto y de qué tipo en el modo de vida de las poblaciones locales, especialmente sobre sus costumbres diarias. Tanto el entierro como todo lo que rodea al ritual funerario son procesos donde dichas costumbres se revelan con más intensidad al tener fuertes connotaciones culturales, por lo que su estudio puede revelar modificaciones en las poblaciones que nos ayuden a entender mejor la citada transición. Para ello se analizaron y compararon las alteraciones *postmortem* o tafonómicas de la necrópolis de A Lanzada, uno de los pocos yacimientos cuyo periodo de uso cubre el lapso temporal de interés con dos zonas de enterramiento bien diferenciadas (romana y tardoantigua). El contexto de enterramiento se estudió en un total de 59 tumbas (39 romanas y 21 tardoantiguas) y la abrasión en superficie, y alteraciones bióticas y abióticas en los 84 esqueletos preservados (38 romanos, 40 tardoantiguos, 6 de cronología desconocida). Los resultados han mostrado cambios en el ritual de enterramiento en la fase post-Romana: una modificación en la orientación de S-N a O-E, ausencia total de ajuar, posición en *decubito supino* y la introducción de enterramientos múltiples (consecutivos) y de tumbas de lajas de piedra. Este contexto funerario se mantuvo en el tiempo en otras necrópolis gallegas. Asimismo, uno de los esqueletos muestra marcas de mordeduras de un cánido. En cambio, el área de enterramiento romana presenta unas características más variadas, incluyendo vestigios de cremaciones, tumbas con *tegulae* y al menos tres enterramientos en *decubito prono* cuyos miembros estaban dispuestos con poco cuidado. Similares tendencias entre ambos periodos se han encontrado en otros yacimientos peninsulares. En base a los resultados se propone la existencia una posible estandarización del ritual en periodo post-Romano, lo cual se intenta relacionar con las transformaciones socioeconómicas y culturales de estos siglos.

Palabras clave: Prácticas funerarias; orientación; tumbas múltiples; *decubito prono*; ajuar; marcas de mordeduras.

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1. INTRODUCTION

1.1 Taphonomical alterations

Taphonomy was defined for the first time in 1940 (EFREMOV 1940) as "the study of the organic remains from the biosphere into the lithosphere". This is understood in Physical Anthropology as

any process affecting human bone between the individual's death until its study by the osteologist (WHITE & FOLKENS 2005: 49), which includes burial context, cut-marks, alterations by animal or plants, *postmortem* rituals and vandalism, among others. This area of interest is so wide that, directly or indirectly (analyzing these features separately),

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it has been always present in the bioarchaeological reports. In recent years, however, an effort has been made trying to systematize the information, which led to an increasing number of specific publications and books (among others HAGLUND & SORG 1997, BOTELLA *et al.* 1999, STODDER 2008). Furthermore, new multi-approach studies helped to improve the overall knowledge about *postmortem* alterations, providing a methodological framework for understanding the multiple processes and events that occurred after the death of the individual (STODDER 2008, ARMENTANO *et al.* 2014).

Some taphonomic features, such as burial and mortuary rituals, are part of the cultural and social identity of a population, since they involve one of the most meaningful moments of a human life (JOYCE 2001). The high complexity and cultural endurance of death rituals make their study suitable for the reconstruction past lifestyles. The care of the cemeteries, the reutilization of graves or the coexistence of different rites provides insights on how a given population perceived the world. Despite its endurance, burial rites changed throughout history. Transitions are considered as those periods when several economic, social and environmental changes occurred, but the very concept conveys the continuity or survival of some elements of former uses (POULTER 2007, page 46). These deep modifications often led to intense cultural changes which could include funerary habits or other taphonomic features. The study of

these modifications can provide new clues to reconstruct everyday life of the communities through transitions.

The pass from Roman to post-Roman times (Late Antiquity) is considered a key transition period in most parts of Europe. As an example, in Northwestern Spain deep social changes, such as the overthrow of Roman rules by a Germanic group known as the *Suevi* and a fall in commerce (NAVEIRO LOPEZ 1991, DÍAZ 2011), coincided with climatic disturbances (MARTÍNEZ-CORTIZAS *et al.* 1999, MARTÍNEZ CORTIZAS & VÁZQUEZ VARELA 2002, MIGHALL *et al.* 2006) and accelerated vegetation changes (MARTÍNEZ CORTIZAS *et al.* 2005). The scarcity of post-Roman written sources as well as the low availability of well identified archaeological sites, limit our understanding of the accompanying changes in lifestyle during this period. Moreover, the anthropological analysis of skeletal remains presents a worse situation, since usually fragmentation and bad bone preservation do not allow detailed studies. The necropolis of A Lanzada, where well-preserved skeletons and two areas of graves, Roman and post-Roman, have been found, offers a good opportunity to address this transition from a bioarchaeological point of view (Fig. 1). This paper encompasses a comparative study of taphonomical modifications on the two diachronic funerary areas as an alternative method to provide new data on the effects of transitions in everyday life.

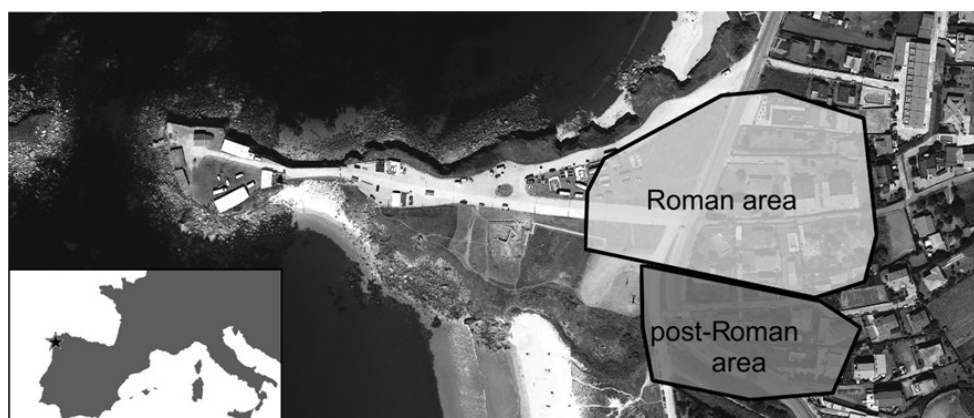


Fig. 1. Map and aerialview of A Lanzada site with the approximated location of both necropolis areas (modified from Google maps ©2014 Google).

Fig. 1. Vista aérea de A Lanzada con la situación aproximada de ambas áreas de necrópolis (modificado de Google maps ©2014 Google).

1.2. A Lanzada site

The archaeological site of A Lanzada is located on the south coast of Galicia (NW Spain) (UTM X- Y-), between the Rias Baixas of Arousa and Pontevedra and near the mouth of the river Ulla. The settlement is surrounded by the sea in a small headland (Fig. 1) at the end of a 2.5 km long beach joined by an isthmus to the Peninsula de O

Grove. The area is rich in seafood and fish, as well as mining resources such as wolfram and tin. The situation offers also a good strategic position over the maritime and riverine traffic (SUAREZ OTERO & FARIÑA BUSTO 1990). These features led to an intense human occupation of the area, at least since the 2nd century BC (RODRÍGUEZ MARTÍNEZ *et al.* 2011). In fact, the settlement record extends from

the Bronze Age to the Medieval period: there are a Bronze to Iron Age settlement, a Roman and Late Antiquity necropolis with traces of a possible settlement, and a defensive tower and a Romanesque church from the Medieval period (FARIÑA BUSTO 1974, SUAREZ OTERO & FARIÑA BUSTO 1990).

The archaeological remains were reported for the first time in 1754, when Fray M. Sarmiento wrote about the finding of numerous bones in mausoleums made of bricks (SARMIENTO 1950). During the 20th century, the Museum of Pontevedra supported several excavation campaigns on the funerary and settlement areas. The works started in 1949 (FILGUEIRA VALVERDE 1949-1959?), but it was not until the 1960s that they covered a large area finding a Roman necropolis on the North-East corner of the site (BLANCO FREJEIRO *et al.* 1961, FILGUEIRA VALVERDE & BLANCO FREJEIRO 1962, BLANCO FREJEIRO *et al.* 1967, FARIÑA BUSTO 1973, 1974). The fieldwork started again in the 1970s focused on the South-East area where the post-Roman necropolis was apparently placed (FARIÑA BUSTO & FILGUEIRA VALVERDE 1974, FARIÑA BUSTO 1975). Afterwards, a couple of surveys were developed (PEÑA SANTOS 1982, RODRÍGUEZ MARTÍNEZ *et al.* 2011).

Despite being a well-recognized archaeological site and some of the reports included anthropological studies (BLANCO FREJEIRO *et al.* 1961, 1967, CARRO OTERO *et al.* 1987), the entire funerary areas as well as the human remains had not been intensely analysed until recent years (LÓPEZ-COSTAS 2012). The existence of two different burial areas covering a transition period (Roman to post-Roman) (Fig. 1)

makes this site ideal for a taphonomical study. Some previous works included body position analysis of some burials (CARRO OTERO *et al.* 1987) or taphonomical alteration in a wider context (LÓPEZ-COSTAS 2012).

2. MATERIALS AND METHODS

This study involves the assessment of aspects which may help to indentify changes in the funerary practices between Roman and post-Roman times. A Lanzada necropoleis are the main focus of the research but comparisons with others sites are also made. Burial rite was analysed based on photographs of the original excavation (e.g. Figs. 2 and 3) together with personal communications from the excavators and their preliminary reports. The main features to discuss concern the nature of burials (primary *versus* secondary), the body position and the presence of grave goods. Burials were divided into two groups according to their location, namely the Roman or post-Roman areas. The skeletons from tombs 41, 43 and 47-53 were recovered in the first campaign and presumably found in the Roman area but they were not mentioned on the last report. In addition, 17 skeletons were found in 13 boxes at the Museum of Pontevedra without any tomb number. Nevertheless, their labels indicate that they were discovered on the 70s campaigns. So, they probably belong to the post-Roman area, since the archaeological works on the 70s were developed on the South part of the A Lanzada site. Personal communications from the archaeological team suggest they belonged to multiple consecutive burials and were stored together.



Fig. 2. General view of the Roman funerary area: simple trench burials and *cappuccina* graves. Graves orientation was S-N. Modified from the A Lanzada Pousadas project and Museo de Pontevedra.

Fig. 2. Vista general de una zona de la necrópolis Romana en la cual se observan tumbas excavadas simples y de estilo cappuccina, ambas con orientación S-N. Foto modificada de la obtenida por el proyecto Pousadas- A Lanzada y el Museo de Pontevedra.



Fig. 3. Partial view of the post-Roman or Late Antiquity funerary area: one simple trench burial at the front, and some slabs stone coffins at the bottom. Burials orientation was W-E. Modified from a photography of F. Fariña Busto.

Fig. 3. Vista parcial de la zona de la necrópolis Tardoantigua en la cual se observa una tumba excavada simple y al fondo varias tumbas de lajas de piedra, todas con orientación O-E. Foto modificada de una original cedida por F. Fariña Busto.

Burial information was compared with age-at-death and sex estimations of the skeletons deposited on them, in order to find patterns. Sex diagnosis of the adults was determined using methods based on morphological characteristics of pelvic and skull bones (see a summary in BUIKSTRA & UBELAKER 1994). To achieve an age at death estimation of the adults international methods concerning the end morphology of the 1st and 4th rib, the dental wear, the epiphyseal fusion of the sacrum, the auricular surface and pubic symphysis morphology on the pelvic bone, and the cranial suture closure were applied (see a summary in BUIKSTRA & UBELAKER 1994). For the subadults, methods based on the dental development and epiphyseal fusion were used instead (e.g. BUIKSTRA & UBELAKER 1994, SCHEUER & BLACK 2000). Specific data on sex and age determination was published elsewhere (LOPEZ-COSTAS 2007, LÓPEZ-COSTAS 2012). The position of the arms and legs regarding the rest of the body has been preliminarily classified in an earlier study but no relationship with this feature and the burial typology was found (CARRO OTERO *et al.* 1987). Due to the wide variability of body positions and the poor descriptions in the archaeological reports (only photographed graves can be discussed) I decided not to include this item on the study.

The preserved human remains were analysed looking for taphonomical marks. The unidentified skeletons were assigned to the Roman and post-Roman funerary areas according to the year of excavation. This was not possible for six individuals, which were grouped as "non-identified area". The surface erosion/abrasion scale (0 to 5+) developed by McKinley (2004) was estimated for

each skeleton. Other taphonomical alterations were analysed following the recommendations of Botella *et al.* (1999, 2001), with particular attention to marks of human and animal disturbance and scavenging (HAGLUND & SORG 1997). Diagenetic changes such as root impressions or fungi colonies were also recorded. Preservation indexes are not considered because of possible bias due to the imperfect collection/recording of the first campaigns, when only cranial and long bones were stored discarding short and flat bones.

A spreadsheet was filled with all data about the graves and the individuals they contained. Statistical analysis was made using the program SPSS 16.

3. RESULTS

The burial contexts of the Roman and post-Roman graves were explored, finding important differences between both periods (Table 1). Two cremations were excavated, both belonging to the Roman section of the necropolis. According to reports, they were large collective cremations (2 m in diameter and 20-70 cm deep) with an important amount of bone fragments and charcoal (BLANCO FREIJEIRO *et al.* 1961, 1967). Other archaeological finds included a coin (minted in AD 231), and a good number of pottery, glass and metal objects (BLANCO FREIJEIRO *et al.* 1967). Despite the description of these areas as *ustrina* (BLANCO FREIJEIRO *et al.* 1967), no available data enables to know if they were primary or secondary deposits. The other graves were considered inhumations, since human bones were not burnt (see SILVA 2007, SYMES *et al.* 2008). Moreover, the skeletons

whose burial context could not be reconstructed were also classified as inhumations according to this criterion. The inhumation burials were split up into single and multiple considering the number of bodies, one or more, deposited on them. Single burials are the most common type of grave in both sections of the necropolis; multiple consecutive or reused graves were only found in the Post-Roman area. Multiple consecutive burials are defined as graves containing two or more individuals buried in the same pit at different times, as the result of reopening the grave at some time after the first burial

to allow a second or third interment (STOODLEY 2002, SPRAGUE 2005). At least three multiple consecutive burials were found at the site: two burials with two skeletons numbered as tomb 4 and 5, and one with three, tomb 7. Tomb 4 contained one male (30-35 years old) and one female (55-60 years old); in tomb 5 only remains of a young female were recovered but photographs show bones from at least another individual; and tomb 7 contained one male skeleton (30-35 years old), a female (50-55 years old) and a subadult (9-10 years old).

Table 1. Main features of the Roman and post-Roman tombs according to reports, photographs and personal communications. Totals are the number of graves; ind= number of individuals.

Tabela 1. Cuadro resumen de las principales características de las tumbas del área Roman y Tardoantigua según los informes, fotografías y comunicaciones personales conservados.

Grave characteristics		Roman	Post-Roman
Type of burials	Cremations	2	-
	Single inhumation	38	15
	Double consecutive burial (inhumation)	-	2
	Triple consecutive burial (inhumation)		1
Body position	Supine	26	18
	Prone	3	-
	Lying on right/left side	6 (3 R/3 L)	-
	Foetal	2	1
Burial items	Grave good	7	-
	Hob-nails/dress accessories	4	-
	Grave good and dress accessories	16	-
	Absence of burial items	13	20
Orientation	W-E	-	21
	S-N	26	-
	SW-NE	7	-
	SE-NW	6	-
Type of tombs	Earth grave/simple trench burial	13	7
	Earth grave with <i>imbrex</i> under the head	10	-
	Earth grave surrounded by stones	8	-
	<i>Tegulae</i> grave (<i>cappuccina</i>)	5-8	-
	Stone slabs coffin	-	10 (14 ind)

The Roman area presented a high variation in body positions, including three prone and six individuals lying on their side. In contrast, the vast majority of the skeletons found in the Late Antiquity funerary area were buried in supine posture (see Table 1 and 2). The prone burials belonged to three different skeletons apparently placed in no adjacent graves. In two of those graves, bodies seem to have been thrown carelessly, one of them was not found among the materials from the site excavation and the other belongs to a young female (25-30 years old) with her head far below the rest of the body. Archaeologists reported a skeleton from a perinatal

child found in the abdominal area of this last individual who may have been pregnant (BLANCO FREIJEIRO *et al.* 1961). The third skeleton belonged to a male and had the hands on his back in a position suggesting they were tied. There were no associated grave goods and were placed directly on the sand. No signs of pathological lesions have been found in the preserved bone pieces of those two skeletons. Regarding the six individuals lying on right/left side, of which only four could be studied, they belonged to one male and three females, with no particular distribution of the graves according to the body position (see Table 2).

Table 2. Individualized description of the graves whose photographs were available or mentioned on 50s to 70s reports (FILGUEIRA VALVERDE 1949-1959?, BLANCO FREJEIRO *et al.* 1961, FILGUEIRA VALVERDE & BLANCO FREJEIRO 1962, BLANCO FREJEIRO *et al.* 1967, FARIÑA BUSTO 1973, 1974, FARIÑA BUSTO & FILGUEIRA VALVERDE 1974, FARIÑA BUSTO 1975).

Tabela 2. Descripción individualizada de las tumbas según los informes de los años cincuenta a setenta (FILGUEIRA VALVERDE 1949-1959?, BLANCO FREJEIRO *et al.* 1961, FILGUEIRA VALVERDE & BLANCO FREJEIRO 1962, BLANCO FREJEIRO *et al.* 1967, FARIÑA BUSTO 1973, 1974, FARIÑA BUSTO & FILGUEIRA VALVERDE 1974, FARIÑA BUSTO 1975).

Area	Nº tomb	Year	Orientation	Typology	nº	Body position	Gravegood	Nº skeleton	Sex/Age
Roman	1	1949-60	SE-NO	eg-i	1	supine	G,C		
Roman	2	1949-60	SE-NO	eg-i	1	supine	G,C		
Roman	3	1949-60	SE-NO		1	supine	C	201	m/MA
Roman	4	1949-60	SE-NO	eg-i	1	supine	G,C	215	m?/MA
Roman	5		SO-NE	cap	1	supine	G,C		
Roman	6	1949-60	SO-NE	cap	1	*	G,C	213	m?/OA
Roman	7	1949-60	SO-NE	eg-i	1	supine	G,C	216	m/MA
Roman	8	1949-60	SO-NE	eg	1	supine	G	217	m?/MA
Roman	9	1949-60	SO-NE	eg-i	1	supine	G,C	218	f?/MA
Roman	10	1949-60	SE-NO	cre	*	*	G,C		
Roman	11	1949-60	S-N	eg	1	left side	G,C		
Roman	12	1961-63	S-N	eg-i	1	supine	G,C	202	m?/?
Roman	13	1961-63	S-N	cap	1	supine	G,C		
Roman	14	1961-63	S-N	cap	1	right side			
Roman	15	1961-63	S-N	eg-i	1	supine	G,C	203	m?/YA
Roman	16	1961-63	S-N	eg	1	supine	G	238	SA
Roman	17	1961-63	S-N	eg-s	1	supine	G	204	f/?
Roman	18	1961-63	S-N	eg-s	1	supine	G	205	f/?
Roman	19	1961-63	S-N	eg-s	1	prone	G	219	f?/YA
Roman	20	1961-63	S-N	eg-i	1	supine	C	220	m/?
Roman	21	1961-63	S-N	eg	1	prone		221	m/YA
Roman	22	1961-63	S-N	cap	1	supine	G	206	f/?
Roman	23	1961-63		cre			G,C		
Roman	24	1961-63	S-N	eg	1	supine		222	f?/YA
Roman	25	1961-63	S-N	eg	1	supine		207	m/YA
Roman	26	1961-63	S-N	eg	1	right side		223	f/YA
Roman	27	1961-63	NE-SO	eg	1	supine		208	m/MA
Roman	28	1961-63	S-N	eg-i	1	supine			
Roman	29	1961-63	S-N	eg-i	1	left side	C	209	f?/MA
Roman	30	1961-63	NE-SO	eg	1	prone		210	f/YA
Roman	31	1961-63	S-N	eg-s	1	right side		224	f?/YA
Roman	32	1961-63	S-N	eg-s	1	supine	G	225	m/MA
Roman	33	1961-63	S-N	eg	1	supine		211	m?/OA
Roman	34	1961-63	S-N	eg	1	supine	G,C	226	f?/YA
Roman	35	1961-63	S-N	eg	1	supine	C		
Roman	36	1961-63	S-N	eg-s	1	supine	G?,C	227	f/MA
Roman	37	1961-63	SE-NO	eg-s	1	supine		228	m/MA
Roman	38	1961-63	S-N	eg	1	supine		229	f/MA
Roman	39	1961-63	S-N	cap?	1	left side	G,C	230	m?/OA
Roman	40	1961-63	S-N	eg-s	1	supine			

Roman?*		1981	O-E	cap?	1	supine			SA
Roman?*		1983	O-E	cap?	1	supine			f/YA
post-Roman	1	1977	O-E	eg	1	supine		260	m/OA
post-Roman	2	1977	O-E	ss-co	1	supine		266	SA
post-Roman	3	1977	O-E	eg	1	supine		267	SA
post-Roman	4	1977	O-E	ss-co	2	supine		255/257	f/OA-m/YA
post-Roman	5	1977	O-E	eg	2	left side		252/?	f/YA-?
post-Roman	6	1977	O-E	eg	1	supine		264	SA
post-Roman	7	1977	O-E	ss-co	3	supine		261/262/263	m/YA-f/MA-SA
post-Roman	8	1977	O-E	eg	1	supine		265	m/YA
post-Roman	9	1977	O-E	ss-co	1	supine		249	m/MA
post-Roman	10	1977	O-E	ss-co	1	supine		256	f/MA
post-Roman	11	1977	O-E	ss-co	1	supine		272	SA
post-Roman	12	1977	O-E	ss-co	1	supine		251	m/MA
post-Roman	13	1977	O-E	ss-co	1	supine		246	m/MA
post-Roman	14	1977	O-E	ss-co	1	supine		244	f/YA
post-Roman	15	1977	O-E	eg	1	supine			
post-Roman	16	1977	O-E	eg	1	supine		242	m/YA
post-Roman	17	1977	O-E	ss-co	1	supine		258	SA
post-Roman	18	1977	O-E		1			250	f/MA

* indicates the two tombs discovered on the 80s (PEÑA SANTOS 1982, CARRO OTERO *et al.* 1987). n° indicates number of individuals found in the grave, and the n° skeleton are the laboratory codes. ?= information is lost or cannot be determined.

Key: m=male; m?= probably male; f=female; f?= probably female. SA Subadult (<20 years); YA=young adult (20-35 years); MA=middle adult (35-50 years); OA=old adult (50+ years); G=with grave goods; C=clothes items, hobnails. cre= cremation; eg= earth grave; eg-i= earth grave with *imbrex*; eg-s= earth grave surrounded by stones; cap= *cappuccina* grave; ss-co= stone slabs coffin.

*Marca los dos enterramientos descubiertos durante la década de 1980 (PEÑA SANTOS 1982, CARRO OTERO *et al.* 1987). n° identifica el número de individuos hallados en la tumba, y n° skeleton se refiere a los códigos usados durante el trabajo de laboratorio. ?= indica datos perdidos o que no pueden ser estimados.

Clave: m=masculino; m? probablemente masculino; f= femenino; f?= probablemente femenino. SA subadulto (<20 años de edad); YA= adulto joven (20-35 años); MA=adulto maduro (35-50 años); OA=adulto senil (50+ años);

G=con ajuar; C=restos de vestimenta o calzado. cre= cremación; eg= enterramiento sencillo; eg-i= enterramiento sencillo con *imbrex*; eg-s= enterramiento sencillo rodeado de piedras; cap= tumba *cappuccina*; ss-co= tumbas de lajas de piedra.

The orientation of the graves was also different, since the post-Roman ones are strictly West-East oriented (Fig. 3) while those of the Roman section were predominantly South-North (Fig. 2), despite some slight variations to the East or West. The majority of graves (31/40, 77%, in Roman and 7/18, 39%, in post-Roman) were directly buried on the soil, so called "earth graves" or simple trench burials (Table 1 and 2). Individuals were buried on wood coffins (whose nails were found around the skeletons) or covered only with a shroud. Besides those types of burials, two variants have been also detected in the Roman area of the necropolis, namely skeletons (8/36; 22%) surrounded by stones of different size; and skeletons (10/36; 27%) with a tile or *imbrex* under their head as a pillow.

Apart from the earth graves, at least five individuals (5/36; 14%) were buried in a type of grave

known as *cappuccina* or *cappuccina*-style grave (Fig. 2, Tables 1 and 2). *Cappuccina* are described as tombs with a base made of tiles and covered with standing tiles as a roof over the body. On A Lanzada funerary *cappuccina* graves were only found associated to inhumations, although cremation burials with this type of grave were also identified on several roman funerary areas in *Hispania* and Sicily (among others GONZÁLEZ VILLAESCUSA 2001, VAQUERIZO GIL 2002, DELAMARD 2011, CIURANA PRAST 2013, VAQUERIZO GIL 2013). Individuals were usually placed on a surface made of square tiles, or *tegulae*, and some of them had also wood coffins. The *cappuccina* can be considered the most sophisticated type of burial in A Lanzada and according to the available photographs the number of these graves would have been higher than the ones identified here. Two additional *cappuccina*-style

graves were discovered in the 80s (see Table 2) on the southern edge of the necropolis; as we had no access to the skeletons, anthropological information is based only on data from previous reports (PEÑA SANTOS 1982, CARRO OTERO *et al.* 1987). The fifth type of tomb concerns coffins made of stone slabs, where one or more skeletons were deposited. It was found exclusively on the Late Antiquity funerary area and the three multiple consecutive burials (3/17; 18% of graves) belong to this type.

The presence of burial items is also closely related to the necropolis area. The majority of the Roman graves presented some kind of grave good (23/40), whether metal, glass, pottery or shells specifically placed near the body, including 16 coins mainly dated between the AD 3rd and the 4th centuries. Hob-nails or other dress accessories such as brooches were also found in half of the described skeletons (20/40). In contrast, no grave good was documented and recovered in the post-Roman area (Fig. 3). No stela or other funerary structure of this type was found on surface in the entire excavated necropolis, although a Roman one has been described

to be reused as part of a nearby bridge close to the Romanesque church (BLANCO FREIJEIRO *et al.* 1961).

The erosion/abrasion marks on the bone surface are presented in Table 3. In both funerary areas most skeletons (56/84; 67%) presented none or very little alteration (degrees 0 and 1 in Table 3). This is interpreted as a good degree of preservation of the surface of the bones, which allows a complete osteological and paleopathological study. However, the degree of abrasion on the skeletons from Late Antiquity funerary area tends to be higher than that reported on individuals buried on the Roman area. Eleven (11/40; 27%) post-Roman skeletons presented degrees higher than 2, in contrast with only two individuals (2/38; 5%) of the Roman area (Table 3). Since the degree is evaluated considering the entire skeleton, Roman individuals, whose preserved pieces were only long and cranial bones, could have presented better preservation due to the lack of easily altered bones such as short bones. On the other hand, it was not possible to reconstruct the soil environment in all the cases, which may have had an large influence on diagenetic changes.

Table 3. Distribution of the 84 studied skeletons from A Lanzada according to their erosion/abrasion alteration at surface level (MCKINLEY 2004).

Tabela 3. Distribución de los 84 esqueletos estudiados siguiendo su nivel de abrasión /erosión de la superficie ósea (MCKINLEY 2004).

	Degree 0	Degree 1	Degree 2	Degree 3	Degree 4	Degree 5	Degree 5+
Roman (n 38)	14 37%	15 39%	7 18%	1 3%	0 -	0 -	1 3%
post-Roman (n 40)	12 30%	11 28%	6 15%	7 17%	2 5%	2 5%	0 -
Unknown (n 6)	1 17%	3 50%	0 -	1 17%	0 -	0 -	1 17%
Total (n=84)	27 32%	29 35%	13 16%	9 11%	2 2%	2 2%	2 2%

Regarding the type of alteration, only 15 (15/84; 18%) skeletons presented important changes (degrees 3 to 5+, see table 4). Taphonomical modifications caused by diagenesis or pressure, commonly found in other Galician sites (LÓPEZ-COSTAS 2012), show a low incidence in A Lanzada human remains (see table 4). Fungal colonies show a similar situation, since they are usually associated with high humidity and chemically altered bone. The most notable biotic marks were found in the individual

coded as 244, in which several furrows and scoring marks were found on a fifth right metatarsal. Lesions are compatible with dental impressions of a canid (dog) (Fig. 4). The trabecular surface of the distal end is visible and shows traces of punctures; the compact bone presents scalloped margins. No other similar lesions were found. The body belonged to a young woman (30-40 years old) buried on a slabs coffin in the post-Roman area.

Table 4. Types of taphonomical alterations in skeletons of the Roman and post-Roman funerary areas classified following the recommendations of Botella *et al.* (1999, 2001).

Tabela 4. Clasificación de las alteraciones tafonómicas de los esqueletos de las áreas Roman y Tardoantigua siguiendo las recomendaciones de Botella *et al.* (1999, 2001). n. number total of studied skeletons.

Taphonomical alterations	Roman (n 38)	post-Roman (n 40)	Unknown (n 6)	Total (n 84)
Abiotic alterations: diagenesis	2 (5%)	4 (10%)	1 (17%)	7 (8%)
Abiotic alterations: pressure	-	2 (5%)	-	2 (2%)
Biotic alteration: root impressions	3 (8%)	5 (12%)	3 (50%)	11 (13%)
Biotic alteration: fungal colonies	-	-	-	-
Biotic alteration: carnivore marks	-	1 (2%)	-	1 (1%)
Others: burnt areas	13 (34%)	-	-	13 (15%)



Fig. 4. Taphonomic bone modifications probably made by a dog in a 5th right metatarsal of the individual 244 (white arrows).

Fig. 4. Alteraciones tafonómicas, marcas de mordeduras de cánido en el quinto metatarsiano derecho del individuo 244 (flechas blancas).

Finally, some bones from the Roman area showed burnt marks (table 4). A detailed study revealed that the exposition to fire happened on dry bone (lack of curve transverse fractures; SILVA 2007, SYMES *et al.* 2008). The record of the collection indicates that skeletons excavated in the 1950s and 1960s were studied by Dr. Miguel Fusté Ara in Barcelona (BLANCO FREJEIRO *et al.* 1961, 1967). During the storage, a fire occurred in the laboratory, altering part of the collections deposited there. This information is in agreement with the observed marks in the bones.

4. DISCUSSION

The taphonomic study revealed A Lanzada necropolis as a complex site. The results point to changes in the burial context between the Roman (North) and post-Roman (South) phases; however, some typologies, such as simple trench burials without grave goods, seem to have persisted. The current results raise some new questions: (1) what is the significance, if any, of the changes in burial orientation, presence/absence of grave goods, presence of multiple consecutive graves, graves with tiles and/or stones?; (2) can we assess possible relations between the modifications in burial contexts and changes in lifestyle?; and, (3) what facts can explain the presence of "deviant burials" such as the prone burials and the skeleton with carnivore marks?

The change on grave orientation identified on the Roman/post-Roman funerary areas, namely, South-North and West-East, seems to be the most remarkable feature. Similar studies on other Spanish necropoleis (among others GALEANO CUENCA 1996, GONZÁLEZ VILLAESCUSA 2001, LÓPEZ BORGONÓZ 1998, CARRASCO GÓMEZ *et al.* 2004, MARCOS HERRÁN & REYES HERNANDO 2012) also indicate a preference for the North-South axis in graves dated before the AD 4th century, while West-East seems to be the most common orientation after the AD 4th century. There are also exceptions, as some necropoleis present North orientation in late chronologies such as La Boatella in Valencia (GONZÁLEZ VILLAESCUSA 2001) or Lansargues in southern France (GIRARD & RAYNAUD 1982). The

coexistence of two communities with different burial customs according to the grave orientation was also found in the Roman Necropolis of Ampurias and La Olmeda (LÓPEZ BORGONÓZ 1998, MARCOS HERRÁN & REYES HERNANDO 2012). In Ampurias, an Early/Imperial necropolis area (1st to 3rd centuries AD), whose inhumations presented various orientations including S-N or N-S in coexistence with cremation burials, was found; as well as a late area (late 3rd century onward) in which graves strictly followed a W-E orientation (LÓPEZ BORGONÓZ 1998). This later one was connected with a suburban *villae*, which also introduces the social class or poverty-richness in the selection of burial rites. Toynbee (1971) classified tile- and stone-built tombs as funerary structures for poor people, in contrast to chambers made of masonry or brickwork. According to this classification, both periods of A Lanzada could be considered poor class funerary areas. However, the change in orientation, the absence-presence of grave good and the coexistence with cremation does not seem to be related to social class in the other necropoleis.

The Galician Medieval necropolis of Ouvigo in Os Blancos, Ourense, (10th to 13th centuries) also presents some Roman graves dated between the AD 3rd and the 5th centuries (RODRÍGUEZ COLMENERO 1985, LÓPEZ-COSTAS 2012). To our knowledge, this is the only Late Antiquity necropolis, together with the funerary area from A Lanzada site, that has been object of anthropological analysis in Galicia. Post-Roman burials in Ouvigo follow West-East orientation with the exception of tombs XXVI and XXXVII that were oriented NE-SW. The other features of Ouvigo graves are a mixture of A Lanzada Roman and post-Roman areas: some tile-built tombs (Roman); stone slabs coffins and absence of grave goods (post-Roman). There are other examples of necropoleis dated between the AD 2nd and the 6th centuries with tile- and stone-built tombs such as the ones found in Calle Real of A Coruña (LUENGO MARTÍNEZ 1955, LOPEZ-COSTAS 2008) and in the Archaeological Museum of Ourense (XUSTO RODRÍGUEZ & FARIÑA BUSTO 2007), but their

excavation was incomplete and the studies did not considered in detail the burial context.

According to the funerary studies, the practice of reusing tombs preserving the previous deposited remains, so-called multiple consecutive graves, may have increased their presence from post-Roman times onwards in this area of the Iberian Peninsula; for example, the Galician necropoleis of Santa María and San Bartolomé in Pontevedra, and the medieval burials of Ouvigo (RODRÍGUEZ COLMENERO 1985, LÓPEZ-COSTAS 2012). They have been frequently interpreted as family burials (SUAREZ OTERO 2012), which is in agreement with the sex and age ranges of A Lanzada individuals found in multiple consecutive tombs (two couples and one couple with a subadult). Stoodley (2002) suggested that family-connection should be only considered in special cases such as those where the secondary burials were carefully replaced, as it was the case for A Lanzada. Despite this evidence, DNA analysis will be necessary to confirm that the skeletons inside a stone slabs coffins belonged to the same family-circle. Additionally, the presence of multiple (family) consecutive graves combined with supine position, absence of grave goods and strict W-E orientation have been commonly suggested as a consequence of Christian rites (THOMAS 1981). For example, the introduction of Christianity was proposed as a suitable explanation to the observed delay (1st phase: AD 5th to 6th centuries and 2nd phase: AD 7th to early 8th) in the adoption of these burial rites in the British site at Butler's Field in Gloucestershire (BOYLE *et al.* 1998). Nevertheless, other authors are more sceptic with this assertion, since multiple consecutive graves and W-E orientation were also found in non obvious Christian contexts (RAHTZ 1977) and Christian and pagan rites may have coexisted in the same necropolis (JOHNSON 1997). Therefore, we consider that the interpretation of religious patterns in A Lanzada is possible, but too risky with the current results.

In Galicia, stone slabs coffins have been considered as a typical typology from Germanic or Early Medieval times (FARIÑA BUSTO & SUAREZ OTERO 1997). In fact, regardless of the rock-cut graves, which were also very popular in Early Medieval period, this typology was apparently the most widespread one. In this regard, Dawson (1994: 29) also suggested the relationship between limestone slabs coffins and post-Roman occupation in several British necropoleis. However, the present data do not allow knowing if the introduction of this typology in Galicia was an evolution of previous pagan rituals or was influenced by Germanic invasions, excluding religious aspects. In other sites, such as the cemeteries at York (TOYNBEE 1971), there was an apparently coexistence of *cappuccina* and stone graves, which could suggest a wider use of stone graves not related with

Germanic influence. It is indeed a curious coincidence that the change in burial context seemingly happened in the transition from the Roman to the post-Roman period when intense cultural, socio-economic and even environmental changes took place (NAVEIRO LOPEZ 1991, MARTINEZ-CORTIZAS *et al.* 1999, MIGHALL *et al.* 2006, DÍAZ 2011). Nowadays, it is complicated to assess these complex chronological aspects without complete radiocarbon dating studies, *the main problem is that of dating* (RAHTZ 1977).

The carnivore alterations can be interpreted as a lack of care in the burial process or later maintenance of the cemeteries, so dogs had access to the corpses - but it has also been suggested as a form of punishment (TAYLOR 2008: 97). The upper and lower limb elements are most likely to be damaged during scavenging activity (MORAITIS & SPILIOPOULOU 2010). The carnivore marks found in the foot of skeleton 244 suggests that part of the body may have been exposed. This could have happened when the bones were not completely dry, since this kind of marks seems to occur during the consumption of soft tissues that cover the bones, and during the deliberate consumption of cancellous bone (HAGLUND & SORG 1997, MORAITIS & SPILIOPOULOU 2010). The singularity of the discovery does not allow us to conclude a slackness on the maintenance of the post-Roman cemetery, but at least the 244 corpse was altered despite being deposited in a stone slabs coffin.

Other deviant burials are those where skeletons were found on prone position. The three found in A Lanzada are the only cases of Roman prone burials in Galicia, although few more cases have been found in other areas of the Roman Empire including *Hispania* (among others CARMONA BERENGUER 1990, POLO CERDÁ & GARCÍA PROSPER 2002). Despite their presence in other necropoleis, prone position cannot be taken as common practice in Roman times. In fact, these burials are considered deviant and tended to be liminal or located entirely outside cemeteries (TAYLOR 2008). According to Philpott (1991) no single interpretation can explain the wide variation of reported prone burials. Some of them could be a funeral rite typical of a social class or culture, such as the prone burials and even decapitations in the Anglo-Saxon cemeteries (REYNOLDS 2009). However, if the skeleton shows signs of coercion or carelessness, the punitive cause cannot be dismissed (TAYLOR 2008). Polo Cerdá and García Prosper (2002) provide an interesting discussion about the possible causes of these burials, ranging from strictly ritual or a negligence of the gravedigger, to punitive reasons, suicide or death caused by a disease. In A Lanzada, the reported prone burials suggest a careless deposition in at least two of the skeletons, while the third individual seems to have had his hands tied behind his back, which has been inter-

preted in previous cases as disapproval or even criminal status (see examples in TAYLOR 2008: 109). Nevertheless, their location is in coexistence with other graves and no pathology related to interpersonal violence has been found in the preserved remains (LÓPEZ-COSTAS 2012). In summary, in my opinion, although paleopathological data and location do not support the idea of a violent context, taphonomy points more to this direction than to a simple coexistence of various positions.

5. CONCLUSIONS

The post-Roman cemetery area of A Lanzada showed strong differences in taphonomy and burial context in comparison to that of the Roman period. Specifically, a change in grave orientation towards a strict West-East alignment, a total absence of grave good, the exclusive use of supine position on the burials and the occurrence of burials with more than one individual are the most significant modifications. Funeral characteristics such as simple trench burials or supine body posture have been found in both areas, but Roman rite was apparently more varied, including prone positions and the use of cremation burials.

The changes in burial typology during the Roman/post-Roman transition in A Lanzada have been also detected in other Iberian sites, which indicates that Galicia was not isolated from European influences. Additionally, this new burial trend in the Late Antiquity period became a common practice in Early and Late Medieval Galicia and NW Iberia. Current data suggest that an increased standardisation of burial rites may have started in the post-Roman period, which might be connected with Germanic and/or Christian rules. However, a detailed chronological (i.e. absolute dating) study is necessary to address these aspects.

Other features to consider are the deviant burials such as the prone skeletons in the Roman funerary area and the individual with canid marks from the post-Roman grave. In the case of prone burials, I think that their careless or tied-hands position should make us to rethink if A Lanzada can be considered an ordinary necropolis, or at least some graves may have been related to a violent context. In regard to the skeleton with canid taphonomical modifications, this is to our knowledge the only published case for this period in the Iberian Peninsula; although the literature reflects the existence of similar modifications in other chronologies (BOTELLA *et al.* 1999). Nowadays, few studies record this type of modification - therefore a possible bias should be considered. More work in contemporary necropoleis is necessary to understand if it is an isolated case or the consequence of a possible carelessness on funerary areas during this period.

Finally, a complete taphonomical study, including burial context but also *post-mortem* disturbances, has proven useful to understand funerary

habits and increase the knowledge about past populations. For the A Lanzada site, it also allowed establishing differences between two periods associated to historical changes. More recent data regarding the conditions of storage of the archaeological human remains has been also used to aid on the interpretation of some taphonomical modifications, namely the burnt marks in skeletal pieces.

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