Site and Introduction

The ancient city-kingdom of Kition extends underneath the modern city of Larnaca and its surroundings, in the southeast part of Cyprus (Figure 1). The site has been thoroughly studied up to its decline in the 4th century AD. Both Karageorghis (1985, 2005) and the French Mission under the direction of Yon (1994, 2000, 2006) and Fourrier (2015) have provided us with a clear picture of a thriving city-kingdom up until the Late Roman period. Human habitation here dates back to the Middle Bronze Age as a minor settlement, while after the silt of Hala Sultan Tekke’s port, it reaches its peak as a major urban centre at the end of the 13th c. By the 9th c. BC the site prospered into a multicultural settlement with a strong Phoenician connection. Among the factors that contributed to the emergence of Kition into a key Cypriot site was its strategic position, which rendered it an ideal naval base, as well as its harbour, which facilitated the export of primarily copper and timber to Egypt, Greece and the rest of the eastern Mediterranean (Karageorghis 1973; Yon and Childs 1997).

Ongoing excavations by the Department of Antiquities as part of mitigation efforts related to the waste water and sewer modification project have brought to light new sections of ancient Kition and its cemetery. The analysis of the skeletal remains from these excavations can provide unique insights to the diachronic occupation of this key location. The skeletal analysis of this assemblage was initiated in the summer of 2019 as a collaborative effort between the Department of Antiquities, Texas State University, and the Cyprus Institute.

Materials and Methods

The first data collection season (July-August 2019) focused on the remains from two tombs: Agiou Georgiou Kontou street T1 23M-1 (hereafter T1), dating from Classical to Hellenistic times, and Anagennises street T2-D900-D221.3 (hereafter T2), dating from Hellenistic to Roman times. Most burials represented primary inhumations (with some post-depositional disturbance) but scattered skeletal elements were also found (Figure 2). This presentation will focus on the primary inhumations as these represent the majority of the assemblage.

The state of preservation of the remains was assessed using the Zonation method (Knüsel and Outram 2004) to record which parts of each skeletal element are present. The Anatomical Preservation Index (API) (Bello and Andrews 2006) was determined what percentage of each element is preserved, and the Qualitative Bone Index (QBI) (Bello and Andrews 2006) to mark the percentage of well preserved cortical bone. Standard morphological and metric skeletal markers of the pelvis, cranial and long bones were used for the estimation of age and sex (Nikita 2017 and references therein). In addition, pathological lesions were recorded according to Bolkstra and Ubelsaker (1994), entheseal changes were scored in fibrocartilagenous enthese of the upper limbs according to Villotte et al. (2010) method, while stature was estimated based on long bone lengths using the equations by Rufli et al. (2012) and Celbis and Agritmis (2006).

Results and Discussion

The osteological analysis to date has identified 14 individuals in T1 and 20 in T2. The specific, the mean API value for T1 was 3.899 while for T2 it was 4.008, and the mean QBI value for T1 was 4.177 while for T2 it was 4.391. The difference between these values was statistically significant (p = 0.015 for API, p = 0.001 for QBI). The poorer preservation of T1 can be attributed to the fact that this tomb was found looted and flooded.

The demographic profile of the sample per tomb can be seen in Figure 3, and per context (inside or outside sarcophagi) in Figure 4. Figure 3 shows that Tomb 1 contained more individuals of indeterminate age, classified in the generic ‘adult’ category, than Tomb 2. This finding is associated to the lower preservation of the remains in Tomb 1. In addition, Tomb 1 contained more young adults compared to middle adults whereas this pattern is inverted in Tomb 2. Given the small sample sizes and the high number of individuals that could not be aged, this pattern should not be interpreted as indicating a shorter life span for those interred in Tomb 1. On the other hand, it is very interesting that the demographic profile of those interred inside sarcophagi is very similar to that of the individuals found outside these (Figure 4), suggesting no association between mortuary treatment and demographic characteristics, as least from the very small part of the cemetery examined.

The pathological conditions identified in the sample are typical for bioarchaeological assemblages and include degenerative joint disease, Schmorl’s nodes, periodontal, dental diseases and trauma. Degenerative joint disease was the more frequent condition in the sample and affected mostly individuals in T2 (Figure 5). The overall caries rate is low for both tombs (3.2% of available teeth) with a moderate tooth loss (12.8% of sockets).

Stature could be estimated for seven individuals from T2 and ranged from 162.1 to 164.2cm for males and from 159.2 to 169.2cm for females. The entheseal changes recorded on the current sample are too few to be discussed at this stage.

Concluding remark

The excavations in ancient Kition have revealed dozens of tombs and are expected to bring to light many more in the following months. While our study is still at a very early stage, the demographic characteristics, pathological lesions, and metric traits identified on the individuals of this site highlight the need for more extensive research in this direction.