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# Short Fieldwork Report: Tell Barri (Syria), seasons 1980–2006

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# Tell Barri (Syria), seasons 1980–2006

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Tell Barri (ancient Kahat) is located approximately midway along the road between Hassake and Qamishly in north-eastern Syria. The site (36°44'20"N 41°07'37"E) is situated on the bank of Wadi Jaghjagh, the major seasonal tributary of Khabour, 10 km north of Tell Brak. Although average in size (~37 hectares), the mound is very high (more than 30 meters). It has been excavated since 1980 by an Italian team directed by Paolo Emilio Pecorella (University of Florence) and from 2005 by Raffaella Pierobon Benoit (University of Naples Federico II). The oldest settlement in the closest neighbourhood of Tell Barri is dated to the Halaf period, but the site itself was inhabited since the beginning of the Early Bronze Age (EBA). Archaeological activity at the site has focused on two large areas, one (Area G) in the south-eastern part of the tell, where virgin soil has recently been reached, and the other (Area J) on the south-western and western sides of the site (see **Figure 1**). The results of the excavations have been described in several preliminary reports and two final volumes (Pecorella & Salvini 1982; Pecorella 1998), a third is in preparation.


**Figure 1**. Tell Barri from the south (September 2005, photo taken by A. Sołtysiak).

The stratigraphical sequence covers almost all periods from the Early Bronze Age (29th century BCE) to the Middle Ages (13th century CE); a recent Islamic cemetery has also been located on top of the tell. Most human skeletons have been excavated in Area G. The remains of a palace built by the Assyrian king Tukulti-Ninurta II (891–884 BCE) were found in Area J and no deeper excavations were undertaken there, although above the level of this palace a number of individuals dating to the Achaemenian period were excavated. A total of 106 skeletons or bone clusters (92 from Area G and 14 from Area J) were available for examination. The bones were studied in the dig house during the autumn excavation seasons of 2005 and 2006 following the protocols described in Buikstra and Ubelaker (1994). After the analysis, the bones remained in the storage rooms at Tell Barri, only teeth and selected

bone samples were exported to Poland for further biochemical studies. **Table 1** presents the sex and age data for all periods to which at least one skeleton was dated.

**Table 1**. Sex and age patterns in the sub-samples from Tell Barri (listed in chronological order).

| Period | Infants (0-2 years) | Children (2-14 years) | Juveniles (14-21 years) | Adults | | | Total |
|---|---|---|---|---|---|---|---|
| | | | | F | ? | M | |
| Early Bronze Age IIa | 10 | | | | | | 10 |
| Early Bronze Age II-IIIa | 2 | 1 | | 2 | | | 5 |
| Early Bronze Age IIIa | | | | 1 | | 2 | 3 |
| Early Bronze Age IIIb | | 1 | | | | | 1 |
| Early Bronze Age IVa | 2 | | | 1 | 3 | | 6 |
| EBA IVb / MBA I | 2 | 4 | | | 6 | 1 | 13 |
| Middle Bronze Age I | 4 | 2 | | 1 | | 1 | 8 |
| Middle Bronze Age I-II | 3 | 2 | | 2 | 1 | 4 | 12 |
| Middle Bronze Age II | 3 | | | 2 | | | 5 |
| Mitanni | 1 | 1 | | | | | 2 |
| Middle Assyrian | 1 | | 1 | 1 | 2 | | 5 |
| Neo-Assyrian | 3 | 5 | | 1 | 3 | 4 | 16 |
| Achaemenian | 1 | | | 3 | 6 | 2 | 12 |
| Parthian | | | | | 1 | | 1 |
| Modern | | | | 2 | | 3 | 5 |
| Unknown | | | 1 | | 1 | | 2 |
| **Total** | 32 | 16 | 2 | 16 | 23 | 17 | **106** |

There is no apparent sex bias in the sample. In contrast, the age distribution is significantly biased in some periods: there is a distinct surplus of newborn children during the EBA IIa and a less clear excess of older children in the Neo-Assyrian period. It is unlikely however, that such patterns are linked to actual differences in childhood mortality, but they most likely reflect burial practice, at least in the case of the skeletons dating to the EBA IIa. Remains of the newborn children from this period were found in a very peculiar context, they were placed just beneath the floors of buildings interpreted as possible shrines.

Even more unclear are the data from the Neo-Assyrian sample (and to a lesser extent the sample from the transitional period between the EBA and Middle Bronze Age (MBA)) with more older children recovered than expected. Since both periods are also characterised by an increase in frequency of linear enamel hypoplasia and a decrease in frequency of dental caries, it is possible that the greater mortality of older children reflects a higher rate of physiological stress during the Neo-Assyrian period (and to a lesser degree during the transition from the Early to Middle Bronze Age). This increase in stress-related pathology in the Neo-Assyrian sample may perhaps be related to the agricultural crisis that had begun in 12$^{th}$ century BCE, which some have suggested may have been a consequence of climatic change (Neumann & Parpola 1987). These issues will be discussed at length in the final report concerning the human skeletons from Area G, published in the third volume of the Tell Barri/Kahat series (Pecorella & Pierobon Benoit in press).

Some unusual pathological changes were observed on the bones and teeth of individuals found at Tell Barri. Perhaps the most unexpected discovery was three fibulae from two

individuals dated to the transitional EBA/MBA cemetery. Two of the fibulae exhibited clear and well healed regular side-to-side perforations through their midshafts while the third presented traces of an analogical perforation visible on the surface. It seems to be a healed injury made with a long nail, but this case requires further examination. Unfortunately, the skeletons of both individuals were incomplete and poorly preserved. Regardless, individual 1148 was perhaps an aged male, with clear osteoarthritis of the femoral head. The second individual (1115) was more likely a male than a female.

A rare developmental abnormality of the dentition was also observed at Tell Barri. Supernumerary central incisors were noted in both the left and right maxillae of an 8 year-old child (640) dated to the MBA. Both sets of incisors were almost completely erupted and ultimately inhibited the development of the lateral incisors, which had deformed and underdeveloped roots. In another Late Bronze Age 6 year-old child (990), there was acute osteomyelitis in the right side of the mandible and multiple inflammatory bone reactions were noted on the cranial base and cervical vertebrae. X-ray images revealed that this extensive infection had initiated in the dental pulp of the deciduous second molar due to a large cariotic lesion and probably caused this child's death. The burial was built of bricks and contained abundant grave goods, leading one to assume that this individual belonged to the upper class of society and his carious lesion may be an indication of the high sugar content of his diet.

From a taphonomic perspective, the most interesting case was that of an 11/12 year-old child buried in grave 895 in the Neo-Assyrian cemetery. The bones were slightly burned; especially the lumbar vertebrae, hands, and the face (cf. **Figure 2**). Such an observation was completely unexpected, because so far, only a few isolated cases of cremation have been found in Mesopotamia (cf. Barrelet 1980:4). Only at the site of Yarim Tepe, dated to the Halaf

**Figure 2**. Cremated bones from grave 895.

period, has such a burial custom seemed to not be accidental (Merpert & Munchaev 1993). The almost complete absence of cremation in Mesopotamia may be explained in economical terms as the result of a shortage of wood in the region. However, there is also perhaps a religious reason as underlined in the following passage from the Sumerian story *Gilgameš, Enkidu and the Nether World*: "'Did you see him who was set on fire?' 'I did not see him. His spirit is not about. His smoke went up to the sky'" (v. 301–303; trans. Black et al. 2007). Thus, at least in southern Mesopotamia around the turn of the 3rd millennium BCE, cremation was thought to destroy not only the body, but also the *gidim* of the dead.

However, the case of individual 895 from Tell Barri is even more complicated, because the burned skeleton was found in anatomical position, with undisturbed articulations. The body had been buried in two large jars joined by their rims. The child could not have been burned inside the jars since no trace of ash was found and the vessels themselves showed no sign of burning. It is probable that this was not a case of an intended cremation, but rather an unusual accident. The jars were well sealed with bitumen and the body inside decayed in an empty space. Some time after the burial a fire began on the ground just above the grave and the jars covering the defleshed bones acted as an oven. Ash from this fire was found during the excavations and it is likely that the fire was not related to any funerary practices, but rather purely accidental. The elevated temperature, which may have been located near the grave and lasted for some time, was high enough to affect the bones but left no traces on the jars. This unusual case clearly demonstrates that every incidence of burned human bone in Mesopotamia must be studied with great care instead of automatically labeling it as an example of intentional cremation.

A detailed report on the human bones from Area G will appear in the third volume of the Tell Barri/Kahat series (Pecorella & Pierobon Benoit in press). Some of the data from Tell Barri were used by the present author in more general papers concerning temporal trends in the frequency of dental caries in the Khabour basin (Sołtysiak 2006) and on dental size reduction in northern Mesopotamia (Sołtysiak 2007).

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# Gohar Tepe and Goldar Tepe (Iran), seasons 2006–2007

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Gohar Tepe is a large archaeological site located in the Mazandaran province, ca. 5 kilometers west of Behshahr (36°40'42"N 53°24'07"E). During the Middle Bronze Age (MBA), the settlement covered more than 10 hectares, but was later abandoned in the Late Bronze Age (LBA) and was used again in the Iron Age 2/3 as a cemetery. There is also another smaller mound some hundred meters west of Gohar Tepe referred to as Goldar Tepe. The whole area is very interesting from an ecological perspective: there is a narrow strip of fertile plain between the Caspian Sea in the north and the foothills of the Elbrus Mountains in the south, widest in the neighbourhood of Sari some 30 kilometers to the west, but only 6–7 kilometers wide close to Gohar Tepe. The seashore can be reached by foot (a one to two-hour walk) and the hills are less than one kilometer from the main site. Because of this, diverse subsistence strategies were always possible in the region, e.g. mountain hunting and seashore fishing, pastoralism in the hills and seashore meadows, and agriculture and horticulture in the plains and in the mountain valleys (cf. Noel 1921). The hills were abundant with timber, wild honey, and good quality flint; there are also many caves, among them the Hotu Cave associa-