

## THE ANTHROPOLOGICAL REMAINS FROM BURIAL CAVE 900 IN NAḤAL REFA'IM, JERUSALEM

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Human skeletal remains were exposed in Burial Cave 900, in which two burial phases were identified, dating to the Intermediate Bronze Age and Middle Bronze Age II (see Weksler-Bdolah, this volume). The MB II burials were found in two superposed levels. The bones were poorly preserved, impeding the ability to fully reconstruct anthropological parameters. The fragments were scattered and the original burial posture of the dead could not be determined.

The bones were visually examined on-site and left in the cave. Fragmentary animal bones were also present in every locus (see Horwitz, this volume). Diagnostic human bones are described according to locus.

### *Intermediate Bronze Age*

*Locus 912.* The remains included a long-bone fragment, an upper-limb phalanx, a pelvis fragment and one tooth. The phalanx showed fused epiphyses, indicative of an adult individual (Johnston and Zimmer 1989). The tooth (a lower premolar) showed enamel attrition, and the root was closed, indicative of an individual aged 15–20 years (Hillson 1986).

### *Middle Bronze Age II*

*Loci 908, 909* (Lower Burial Level). The remains included a skull vault, postcranial bone fragments and teeth, as well as five distal humeral fragments (two right, three left). The epicondylar widths of the latter could not be measured, although the epiphyses were fused, indicating at least three adult individuals (Johnston and Zimmer 1989). A proximal fragment of a femur and a radius with still-unfused epiphyses were indicative

of an individual aged <16 years (Johnston and Zimmer 1989). Two lower jaws of adult individuals showed minor tooth attrition, indicative of individuals aged 15–20 and 18–25 years. Three lower first molars (right side) represented three additional individuals, whose age at death is estimated as 10–15, 10–15 and 18–30 years. An adult upper jaw included a second molar showing dentine cup in two cusps, indicative of an individual aged over 30 years. Second and third permanent lower molars showed development stages indicative of children aged 8–10 and 10–12 years. Deciduous incisors and molars showed advanced attrition, indicative of a child aged 5–10 years (Hillson 1986). A skull-vault fragment showed a pronounced superior nuchal line, morphology indicative of a male.

*Locus 910* (Lower Burial Level). The remains included a few skull-vault fragments, fragmentary postcranial bones, and teeth. The teeth were sorted into types and their attrition rate was recorded. The teeth represent at least four individuals aged 7–9, 10–15, 20–30 and 30–40 years (Hillson 1986). A cervical vertebra showed osteophytes larger than 1.5 mm, indicative of an individual over 50 years old (Nathan 1962).

*Locus 900* (Upper Burial Level). The remains included a skull vault, postcranial bone fragments and teeth, as well as six distal humeral fragments. The epicondylar widths of the latter measured 60, >60, >55 mm (right side), 61 mm and two broken fragments (left side). One proximal femoral fragment had a

**Table 1. Age and Sex Estimations**

Locus	Period	MNI	Sex Estimation		Age Estimation (years)					
			Male	Female	NB-4	5-9	10-17	18-24	25-40	>40
912	Intermediate Bronze Age	1					1			
908, 909	MB II, lower level	7	1			1	2	3		1
910	MB II, lower level	5				1	1		2	1
900	MB II, upper level	7	2	1	1	1	1	2	1	1
<i>Total</i>		<i>20</i>	<i>3</i>	<i>1</i>	<i>1</i>	<i>3</i>	<i>5</i>	<i>5</i>	<i>3</i>	<i>3</i>

vertical diameter of the head measured as 45 mm. The measurements of the long bones were indicative of at least two males and one female (Bass 1987:151, 219). Three humeri of children could not be measured for length, although bone proportions indicated ages of less than 10 and less than 15 years. A lower thoracic vertebra showed osteophytes larger than 1.5 mm, indicative of an old individual (over 50 years; Nathan 1962). A child's vertebra showed fusion between the vertebral body and the neural arch, indicative of an individual aged over 4 years. Teeth were sorted into types and their attrition rate was recorded. The teeth represented at least five individuals

aged 10–20, 15–20, 15–20, 20–30 and over 40 years (Hillson 1986:176–201).

### *Conclusions*

The human remains from Cave 900 represent at least 20 individuals, 19 of them from MB II loci. Such a minimum number of individuals (MNI) is very close to the average MNI figure reported by Getzov and Nagar (2002) for MB II burial caves in the Galilee. Despite the fragmentary nature of the bones and their hasty on-site examination, the age of most individuals and the sex of three adults could be estimated. The small sample included children and adults of both sexes (Table 1).

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