Forensic Investigation of Barzanian Mass Grave Skeletal Remains at Busaya Desert in Samawa, Iraq

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Abstract

Background and objective: Human identification and anthropological evaluation of mass graves are the key step towards the scientific documentation and achieving justice. This study aimed to investigate the exhumation, anthropological evaluation and individual victim identification of a mass grave in Busaya in Samawa governorate.

Methods: The investigation included excavation of the graves and identification of the victims. The field study was started after taking testimonies and witnesses for locating the site of graves. The sites were determined, which were excavated according to the scientific standard procedures. Gender determination, age and stature estimation were performed on the remnant skeletons in the laboratory of medico-legal institute-Erbil.

Results: The grave included 93 bodies, 66 of them were males which constitute about 71% of the bodies and 24 of them were possibly males which are approximately 26% percent of the bodies, while the others were not identified because of degradations happens to the bones. The results of age estimation reported that the number of young bodies under 20 years old were 5 cases (5.4%), while 53 out of 93 were young bodies between 20-29 years which constitute (57%). While the rest were more than 30 years old, except 8 cases which we could not identify them. The results of stature revealed that more than half of cases had stature more than 166 cm, while only 6 cases were less than 155 cm. All the remained bones were recorded in details for more documentation.

Conclusion: These finding described the anthropological evaluation of a large Barzanian mass grave in Busaya desert, South region in Iraq, which the majority (or all) of the victims were males and young people.

Keywords: Mass grave; Barzanian victims; Busaya; Exhumation; Identification.

Introduction

Investigation and identification of mass graves skeletal remnant are the most important steps toward documenting human rights violations and giving back to families the remaining skeleton of victims, which were considered, until exhumed, as lost or disappeared.1

Mass graves in Iraq are identified as unmarked sites containing at least six bodies. Some can be characterized as deep pits that appeared to have been filled or by mounds of earth piled above the ground. However, older mass graves are difficult to found, because over this long period of time, they have been covered by debris and vegetation.2 Various mass graves have been discovered in all regions of Iraq that contain people of different religious and ethnic groups in the country as well as foreign nationals, including Arabs such as Kuwaitis and Saudis.3

The Iraqi government estimates that there were 250000 to a million of missing people, according to the International Commission on Missing Persons (ICMP); however, some estimates put the number of missing from Saddam's attacks, including attacks against the Kurds in the 1980s and 1990s, at more than 1million. Therefore, the Kurdish people said, "There is another Iraq, buried under Iraq."4
Iraqi Kurdistan Regional Government reported that many mass graves in Kurdistan region contained Iraqi Kurds, who were killed via a process of genocide because of their ethnicity. In 1983 during a military attack against Kurdish citizens in Barzan region, about 8000 individuals belonging to the Barzani tribe were rounded up by the regime in northern Iraq and executed in deserts near Basrah in the south of Iraq. In 1988, Anfal campaign, during which as many as 182,000 Iraqi Kurds disappeared. Most of them were belong to Garmian region. The men were separated from their families and were executed in deserts in the west and south-west of Iraq. The remnants of some of their wives and children have also been found in mass graves. The main aim of this investigation was to present and discuss the exhumation, anthropological evaluation and individual victim identification of Barzanian mass grave in Busaya desert-Samawa governorate in the south region of Iraq.

Subjects and Methods

Study setting and design
The current study was designed as a descriptive investigation for the Barzanian mass grave in Busaya. The field work was started in November 2011 which included taking testimonies and witnesses, site description and excavation. The morgue study was performed in March 2013. The study duration was nine months.

Testimonies and Witnesses for Locating the Graves Sites
However, of the emotional influences on the witness's statements, but still they were the most important and reliable source of information for general or specific site location of the two graves. In this study, the witness's statements were depended on which they were victims saved from the killing.

Site Description and Assessment
Before the excavation took place, a preliminary visit to the suspected site was made to map the area to be excavated. Above all, it was insured that the area has been cleared of surface debris. The graves sites were in Busaya desert, which is located in Samawa governorate.

Excavation
After identifying the location of the two gravesites, the major dimensions (width, length and depth) were estimated as closely as possible. The surface of the ground was examined for finding any important evidence such as bullets, jewelry, personal belongings, etc. The soil was removed and then probed by careful used of picks and shovel and finally, with trowels and brushes.
Osteological Analysis
The osteological analysis was concerned with the determination of the identity of a skeleton, by estimating its age, gender and stature. A count of the ‘minimum number of individuals’ (MNI) was performed as standard procedure in osteological reports on inhumations in order to confirm how many individuals were present by the articulated and disarticulated human bones. The MNI was calculated by counting all long bone ends, as well as other larger skeletal elements recovered. The MNI was considered as the largest number of these skeletons. The MNI was mostly lesser than the actual number of skeletons which have been interred on the site, but it can represent the scientifically proven minimum number of individuals in the graves.\(^8\)

Age was determined using standard aging techniques.\(^9\) Age estimation relies on the presence of the pelvis and uses different stages of bone development and degeneration in order to calculate the age of an individual. Age is split into two categories: Young victims include the ages below 18 years old, and adult victims, which include the ages equal or more than 18 years old.

Gender determination was carried out using standard osteological techniques, such as those described by\(^10\) gender assessment of gender in both males and females who relied on the preservation of the skull and the pelvis and could only be carried out once sexual characteristics have developed, during late puberty and early adulthood. Stature was estimated by applying the formula for the maximum length of femur developed using modern Portuguese samples.\(^11\)

Data Analysis
Microsoft Excel program was applied for summarizing and graphical presentation of the data. Percent values were calculated as a descriptive statistical analysis for the acquired data.

Results
Figure 2 illustrates the distribution of gender in the mass grave. According to our results, the majority of victims were males, as we reported 66 males (70.97%) in the grave among 93 bodies, while the number of cases which we considered them as possible males were 24 (25.81%) out of 93 victims, however only two bodies which we couldn't determine their genders.
Figure 2: Gender distribution according to gender determination procedure in the mass grave

In Figure 3, we explained the distribution of ages at the site. According to the results of the present study, most of the victims were young people in the mass grave. The number of young bodies which were located between 20-29 years and 30-39 years were 53 (56.99%) and 19 (20.43%) respectively. While only 5 (5.38%) out of 93 were less than 20 years of all victims. Whereas 8 cases were more than 30 years and 8 cases could not be identified because of the degradations of the bones. Whereas, the stature of the victims was estimated according to their ages. The most prominent stature was around 160 to 170 cm which was the expected result according to the evidence and testimonies (Figure 4).

Figure 3: Age distribution according to age determination procedure in mass grave
Discussion
Using special form prepared by ICMP, it was recorded the presented and absent bones for each body as much as possible because this work was very difficult and needed too much hard work as most of the bones were degenerated.

For the determination of gender, we tried to determine all, but some of the bodies were not appropriated for that determination. Most of the victims were males because the operation was to eliminate the Barzani clan, which had produced in Kurdish leaders since the 1930s, had been relocated to southern Iraq in 1975, but in 1980s, Saddam’s soldiers arrested up to 8,000 Barzani males and executed them in mass graves in the south region of Iraq.\(^\text{12}\) Despite the usefulness of the technique applied for age identification, but the skeletal remnant was the challenge for age determination because the victims’ remnant bones determine the efficacy of the results.\(^\text{13}\) Therefore, some cases could not be identified because of the degradations of the bones.

Conclusion
The current investigation presented the anthropological identification for the victims in the mass grave in Busaya desert. The evidence confirmed that the mass grave belongs to the Barzanian male victims arrested by Saddam’s army in the 1980s. Almost all victims were males and their age was estimated to be in a range of 20 to more than 40 years.

References