

Egyptian Genetic Profile Part 7: WESTERN EUROPEAN GENETIC REMNANTS IN EGYPT

The historical record shows that the Ancient White Egyptians were finally overwhelmed by Black Nubian and Semitic invaders circa 800 BC. Additional non-White influences were further added with the Muslim invasion of Egypt after 700 AD, creating the heavily mixed population of modern Egypt.

As a result, it comes as no surprise that recent genetic testing in Egypt shows an overwhelming non-White footprint. In spite of the thousands of years of racial mixing, however, a 'WESTERN EUROPEAN' strain was still detected - along with a marked north-south cline in genetic patterns in Egypt, consistent with Black Nubian influence spreading from the south.

Note: the authors of this study attribute the Western European haplotype XV to "Near East, Greek, and Roman influences" - a conclusion that is obviously incorrect as they themselves point out that the haplotype XV is most common in Western Europe, and NOT the 'Near East'.

Original Roman and Macedonian types were of course similar to modern day Western Europeans, but it is unlikely that they ever occupied the region in sufficient numbers to make a statistically detectable impact upon the genetic make-up of Egypt. Obviously, the authors never considered the possibility of ancient racial elements in Egypt which were similar to present day Western Europeans.

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Y-chromosome haplotypes in Egypt

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Abstract

We analyzed Y-chromosome haplotypes in the Nile River Valley in Egypt in 274 unrelated males, using the p49a,f TaqI polymorphism. These individuals were born in three regions along the river: in Alexandria (the Delta and Lower Egypt), in Upper Egypt, and in Lower Nubia. Fifteen different p49a,f TaqI haplotypes are present in Egypt, the three most common being haplotype V (39.4%), haplotype XI (18.9%), and haplotype IV (13.9%).

Haplotype V is a characteristic Arab haplotype, with a northern geographic distribution in Egypt in the Nile River Valley. Haplotype IV, characteristic of sub-Saharan populations, shows a southern geographic distribution in Egypt.

As for mtDNA (Klings et al., [1999]), the present study on the Y-chromosome haplotype shows that there are northern and southern Y-haplotypes in Egypt. The main Y-haplotype V is a northern haplotype, with a significantly different frequency in the north compared to the south of the country: frequencies of haplotype V are 51.9% in the Delta (location A), 24.2% in Upper Egypt (location B), and 17.4% in Lower Nubia (location C). On the other hand, haplotype IV is a typical southern haplotype, being almost absent in A (1.2%), and preponderant in B (27.3%) and C (39.1%). Haplotype XI also shows a preponderance in the south (in C, 30.4%; B, 28.8%) compared to the north (11.7% in A) of the country. In mtDNA, sequences of the first hypervariable HpaI site at position 3592 allowed Klings et al. ([1999]) to designate each mtDNA as being of northern or southern affiliation, and proportions of northern and southern mtDNA differed significantly between Egypt, Nubia, and the Southern Sudan. It is interesting to relate this peculiar north/south differentiation, a pattern of genetic variation deriving from the two uniparentally inherited genetic systems (mtDNA and Y chromosome), to specific historic events. Since the beginning of Egyptian history (3200-3100 B.C.), the legendary king Menes united Upper and Lower Egypt. Migration from north to south may

coincide with the Pharaonic colonization of Nubia, which occurred initially during the Middle Kingdom (12th Dynasty, 1991-1785 B.C.), and more permanently during the New Kingdom, from the reign of Thotmosis III (1490-1437 B.C.). The main migration from south to north may coincide with the 25th Dynasty (730-655 B.C.), when kings from Napata (in Nubia) conquered Egypt.

Concerning less frequent Y-haplotypes in Egypt, haplotype VIII is characteristic of Semitic populations, originating in the Near East (Lucotte et al., [1993]). For example (Lucotte et al., [1996]), the frequency of haplotype VIII is 26.2% among North African Jews (where it represents the majority haplotype) and 77.5% among Jews from the island of Djerba (Tunisia), reaching 85.1% among Oriental (from Iraq, Iran, and Syria) Jews. Similarly, haplotype VII had a general geographical distribution fairly identical to that of haplotype VIII (which it often accompanies as a secondary haplotype); haplotype VII distinguishes itself by increased preponderance north of the Mediterranean and in Eastern Europe (Lucotte et al., [1996]). Haplotype XV is the most widespread Y-haplotype in Western Europe (Lucotte and Hazout, [1996]), where its frequency decreases from west to east (Semino et al., [1996]; Lucotte and Loirat, [1999]). Haplotypes VIII, VII, and XV are less common haplotypes in Egypt (7.3%, 6.6%, and 5.5%, respectively), and tend to be located in the north of the country, near the Mediterranean coast. Possibly haplotypes VIII, VII, and XV represent, respectively, Near East, Greek, and Roman influences.

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