The Neolithic site in the rock shelter of Arma dell’Aquila was discovered in 1934, and excavated in 1936 (Zambelli) and 1938-42 (Richard). The area is characterized by a number of karstic caves, including the famous Arne Candide Cave (Figure 1). In 1934, a burial was found (Z1), and in 1938-42 a total of eight individuals were discovered. After an initial publication of the site (Richard, 1942), and a brief description of the anthropological material (Parenti and Messeri, 1962), no detailed analysis or chronological attribution had been performed. In addition, the “scattered human remains” from the site were never analyzed.

RESULTS: Burials were aligned NE-SW, and were oriented in contraposition, i.e. head against head, and feet against feet, including the presumed double burial containing R3 and 4 (Figure 3 and 4). As a result, although burials R1-4 lay on their left side, they faced alternatively east or west. Burial R5, although consistent with this orientation pattern, was lying supine, and the skull moved post-mortem. The presence of stones raised close to the burial (e.g. R1, Figure 6), close to the head (Figure 7), or forming a natural niche (Figure 8) suggests the use of elements to mark the position and orientation of the burial. Therefore, these burials appear to be part of an organized funerary space.

BIOLOGICAL PROFILE: A MNi of nine individual was identified from the “scattered human remains” unearthed in the 1938-42 excavations. Although the skeletal series still constitutes a small sample for making any definitive paleoanthropological reconstruction, the first preliminary remarks point towards an absence of selection of the individuals to be buried, and suggest that the assemblage is compatible with an attritional profile representing a population with low life expectancy. This is particularly interesting when considering the paleoanthropological observations we made at Arma dell’Aquila.

PALEOPATHOLOGY: Skeletal lesions in the Arma dell’Aquila sample may be related to osteoarticular tuberculosis (TB). Z1 had been diagnosed with Pott’s disease (Canci et al., 1996). R1 shows a radial metaphyseal enlargement which could be due to osteomyelitis, and displays porosity, amel lacunae, and thickened trabeculae in the thoracic spine, loss of lumbar lordosis, and erosion lesions. Multiple space-occupying and cyst-like lesions are present in R2, including the maxilla, scapula, and right ilium (possibly secondary to psoas abscess), and the knee. The only vertebral bodies that were preserved (cervical) display porosity, bone remodeling and erosion, and rarefied trabecular structure. Although differential diagnoses are plausible for each lesion, the presence of multiple lesions suggests a systemic disease, possibly multifocal TB. Other published Neolithic cases of osteoarticular TB in Italy come from the nearby sites of Arne Candide and Pollera. Thinning of the cranial diapophysis is present in R1, R2, and R5, and could be due to trauma, craniofacial or congenital or developmental defects. One 2-3 years old child (RS6) displays rare condition of extreme gracility of all bones, compatible with a severe congenital (osteonogenesis imperfecta), neoplastic, or infectious related systemic disturbance in the skeletal development.

CONCLUSIONS – The Arma dell’Aquila Neolithic site

• Individuals R1-S were buried in an apparently organized funerary space, which is later than R6 (Impresso-Cardinal), and earlier than Z1 (Squared Mouth Pottery).
• When adding the nine individuals reconstructed from the “scattered human remains”, the biological profile of the assemblage is compatible with an attritional profile, yet numerous pathological lesions are present.
• If the lesions are due to osteoarticular tuberculosis, this disease may have had exceptionally high prevalence.
• Material from «old excavations» can provide important information when carefully re-studied.