

Medical geology studies on the arsenic polluted area of Kouhsorkh, NE Iran

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High concentration of arsenic was determined in water and sediments at Kouhsorkh area, Khorasan province, NE of Iran. The main rock formations in the area are Tertiary volcanic rocks with basaltic andesite to rhyodacite composition ⁽¹⁾. Further more some As-Sb-Au mineralization occurred at this area. Concentration of As in water samples at Kouhsorkh area was determined between 10 – 650 ppb that was higher than standard limits ⁽¹⁾. Concentrations of arsenic in sediments were detected to range between 4.2 - 268.2 ppm exceeding EPA (2004) ⁽²⁾. It seems that young volcanic activity is one of the most important factors for arsenic contamination in this area. The first stage of medical geology studies was done at 2 villages of Kouhsorkh area in which the arsenic concentration in water is higher. People at this residential area are suffered from skin diseases including: deeply skin fissure and arsenic lesions on head, hand and foot (fig 1). Detailed medical geology studies are under investigation.

Keywords: arsenic, Kouhsorkh, contamination



Fig (1)- Foot fissures and arsenic lesions on head, hand and foot of the residential of some villages at Kouhsorkh area.

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