This paper presents the results of a case study which investigates the acquisition of Persian consonants by a female child during 6 to 14 months of age. The production data provide an interesting glimpse into one of the ways in which infants acquire language. As physical maturation increases, the infant begins to produce more adult-like utterances. Results from spontaneous and elicited observations through recording her voice and keeping diary suggest that the child's acquisition of consonants takes place at three different levels: (1) Three consonants /b/, /n/, /l/ are produced earlier than month 10; (2) a high percentage of acquisition with seven other consonants /l/, /l/, /l/, /l/, /l/, /l/ takes place around the 11th month of age; and (3) at the end of the 14th month, she can produce seventeen Persian consonants.