Objective: To determine the effect of maternal hydration with intravenous (IV) isotonic fluid, IV hypotonic fluid, and oral water on amniotic fluid index (AFI) in women with oligohydramnios. Methods: This clinical trial Carried out on patients with low AFI & gestational age over 35 weeks without maternal complications were randomized into four groups 2 L/2 oral water; 2 L/2 h IV isotonic Fluid 2 L/2 h IV hypotonic Fluid; control. maternal AFI were measured before & after hydration. All group were matched consider of mother age gestational age gravid & parity. Date were analyzed by spss V13 and compared by paired t test with in each group. The comparison between the group analyzed with one way analysis & tuky test. Result: The mean increase in AFI after hydration was significantly greater than in the oral water hydration group (6±1. 99)P<001 but not in IV isotonic, IV hypotonic group compared with the control group. Conclusion: maternal hydration with oral water was more effective than other groups. Key words: Oligohydramnios, Amniotic fluid index, Maternal hydration.