SUMMARY AND CONCLUSION

The present study was designed to evaluate the effect of different types of maternal hydration (oral, IV isotonic) on amniotic fluid volume (AFI) in late third trimester inpregnant women with olighydramnios (AFI < 6cm) and without oligohydramnios (AFI 6 cm or >).

The study was carried out on 40 late third trimester (37─42 weeks) pregnant women who were attending the outpatient antenatal care unit of the department of obstetrics at Benha Teaching Hospital. The subjects were divided into oligohydramnios group (20 with AFI <6 cm) and (20 control group with AFI of 6 cm or >) . The oligohydramnios and normal groups were further divided into 4 subgroups (10 subjects in each group).

For all women, urine specific gravity, AFI measurement and NST were performed before and after oral or intravenous hydration except NST.

Maternal hydration with either oral or IV isotonic solution (normal saline 0.9%) resulted in a significant increase in mean AFI in both oligohydramnios and normal groups. It also led to significant reduction in the values of urine sp. gravity.

The superiority of different types of maternal hydration was evaluated . Both oral and IV isotonic hydration produced an increased (25%, 28%) in AFI in oligohydramnios groups respectively. This indicates that both oral and IV hypotonic hydration could correct

oligohydramnios, but neither appears to be particularly advantageous over the other.

Maternal osmolality, as evidenced from urine specific gravity changes, with increased net flow of fluid from the mother to the fetus is the mechanism by which AFI might have been increased in both oligohydramnios and normal pregnant women.