I N T R O D U C T I O N

Sickle cell disorders are the most widespread of all known genetic syndromes. The disease is manifested by chronic hemolytic anemia, painful vaso-occlusive crises of varying severity and organ damage resulting from repeated episodes of micro-infarction (Tuck and White, 1981).

Sickling of RBCs is one of the hemoglobinopathies. These are biochemical disorders that function at a molecular level and that affect either the production , or the structural integrity of normal hemoglobin constituents (Morrison, 1979).

Sickle hemoglobinopathies are heriditary disorders in which red blood cells contain hemoglobin S (Hb-S).They include; the heterozygous sickle cell trait and the homozygous sickle cell anemia state of Hb-S (Penington et al,1983). They are transmitted as an autosomal codominant inheritable disorder via what is called an intermediate inheritance (Walter and Israel, 1979).

Motulsky (1973), found that the prevalence of Hb-S disorders among blacks in the United States was 8% for sickle heterozygosity, 0.16% for sickle homozygosity and o.12% for Hb-SC disease.

The combination of sickle cell syndromes and pregnancy is hazardous to both mother and baby. It is only in the last three to four decades that women with sickle cell disease have survived to child-bearing age (Tuck and White, 1981).

To the best of our knowledge sickle cell disorders in pregnant Egyptian women had not been studied before . This may be due to its rarity in our country. Abbassy(1951) and Awny and Zagloul (1955), stated that sporadic cases had been reported in Egypt. At El-Baharia Oasis, and in a survey study among children, Kassim (1980),found that the prevalence of sickle cell anemia was 0.5% and that of sickle cell trait was 13.53%.