

which excludes simple dominant inheritance. On the other hand, in other families both parents may be affected but the children are normal excluding a simple recessive trait<sup>(16)</sup>.

Regarding the mean severity score according to feeding history, the mean S.S for the B.F patients were (21.49±4.97), the mean S.S for the mixed fed patients were (33.34±12.92) while the mean S.S for the formula fed patients were (35.70± 9.79). These results were consistent with another study by Host et al (1999) which showed that B.F has the ability to modifying the diseases severity<sup>(17)</sup>. Typically B.F can decrease the severity of AD, but cannot prevent its occurrence. It is widely recommended for the first 4-6 months. Human colostrums/milk facilitates maturation of the gut and provides passive protection against infectious agents and antigens<sup>(17)</sup>. Saarinen et al, 1979 reported also that the intensity of the manifestations of atopy were softened in children who were on B.F for the first 6 months compared with children who were not ,or who were B.F but for shorter periods of time (up to 2 months)<sup>(18)</sup>.

Exclusive B.F is a protective factor for development of AD if compared with conventional cow's milk formula<sup>(19)</sup>. This protective effect may be related to the fact that allergic conditions in children are often related to food sensitivity, and B.F helps prevent this problem through a variety of mechanisms. Exclusive breast-feeding for 6 months means to avoid feeding the baby any food known as allergen and as precipitation factor of allergic diseases. Breast milk being rich in immunoglobulin A (IgA) can help to protect the gastrointestinal tract by binding foreign protein which has a potential to be allergenic and inhibit its absorption. Nutritional contents of breast milk will stimulate the maturation of gastrointestinal tract, so that it is ready to receive the

antigens, maintain normal flora of gastrointestinal tract, and maintain the immunomodulatory factors<sup>(20)</sup>.

Most of the patients whose total serum IgE levels were below 200 IU/ml were B.F, 7 cases (87.5%), while most of the patients who had total serum IgE above 200 IU/ml were formula fed, (54.2%). This goes with another study conducted by Businco et al. in 2005 who reported that the B.F patients had a total IgE level less than that of patients who were bottle fed<sup>(22)</sup>. This is due to the same reason mentioned above in that B.F is a protective factor against having an allergic disease while cow milk and cow milk protein are an aggravating factor for allergic disorder with subsequent increase in IgE level.

The results of IgE of the present study go with that found by Businco et al. (1983) who observed that the children fed breast milk until the age of 6 months presented significantly lower levels of IgE compared with children fed cow's milk. This may be due to that B.F avoiding the child from early sensitization to cow's milk protein and IgE over production<sup>(21)</sup>.

Most of the study patients who had eosinophil counts below 450 cell /µl were B.F, 26 cases (76.5%) while most of the study patients who had eosinophil count above 450 cell /µl were formula fed (53%). The eosinophils count for the present patients are in agreement with the fact that milk protein allergy can induce eosinophilia<sup>(9)</sup>. Infants suffering from severe AD reveal a low serum albumin level, and electrolyte disturbances, and have significantly higher number of eosinophils and eosinophilic nuclear lobes, platelets, and total serum IgE level<sup>(22)</sup>. The clinical activity of the disease as recorded by the scorad index can be used as an indicator of the hematological abnormalities as well as to some extent as a prognostic indicator<sup>(23)</sup>.