A Comparative study

The benefit of low molecular weight heparin (enoxaparin) in the management of acute vaso occlusive crises in sickle cell disease.

A comparative study by Dr. Anwer SH Jaafar (FCABHS.int.med.)

Internal medicine specialist-Alsadir teaching hospital-Basra health directorate.

ABSTRACT:

BACKGROUND :The benefit of low molecular weight heparin (enoxaparin) in the management of vaso-occlusive crises remains controversial and unclear.

METHOD: A two groups of adult sickle cell disease patients whom admitted to medical ward with vaso-occlusive crises , group A managed by adding prophylactic dose of enoxaparin to their usual supportive line of therapy while group B managed with supportive therapy without enoxaparin. The days of hospitalization ,the complications that noticed , the need for simple blood transfusion ,and the mortality rate are compared in both group.

RESULTS :A total number of 109 sickle cell disease patients, 58 was included in group A , and 51 patients in group B.The main presenting symptom was acute vaso-occlusive crises 55(94.8%) in group A, 48(94.1%) in group B ,patients presented with acute chest syndrome(ACS) were 3(5.2%),and 3(5.9%) in group A and B respectively The main finding was a reduction in days of hospitalization in group A (median =2 days) ,compared to group B (median = 3 days), with statistical significance( p value=0.0001).The complications noticed in [4 (6.8%) in group A ,while 4 (8%) patients in group B p value=0.3 ] The need for simple blood transfusion [11(19%) in group A and 11(21.6)% in group B with p value= 0.735], The mortality rate in[ group A 1(1.7%) , while in group B was 4(7.8%)], No patient in both group developed bleeding complications.

CONCLUSION :Among patients with sickle cell disease with vaso-occlusive crises ,the addition of LMWH (enoxaparin) in a minimum prophylactic dose to their supportive treatment reduces the length of hospitalization without increase in bleeding risk complications.

Keywords

Sickle cell disease(SCD), vaso-occlusive crises, LMWH(enoxaparin), acute chest syndrome(ACS).