

Effect of Good Hydration in the Prevention of Post-ERCP Pancreatitis

This cross sectional prospective study was conducted on 100 patients recruited from The Tropical Medicine Department, Beni-Suef University Hospital during the period between March 2017 and March 2018. The aim of the study was carried out to evaluate the role of good hydration before and after the procedure in prevention of post ERCP pancreatitis.

Patients were divided into two groups as follows:

- The standard group: which comprised (50) patients who recieved the standard hydration (Ringer lactate 1.5 mL/kg/h during and for 8 h after procedure).
- The aggressive group: which comprised (50) patients who received aggressive hydration (lactated ringer's solution 3 ml/kg/h during the procedure, 20 ml/kg bolus after ERCP and 3 ml/kg/h for 8 hours).

The results of the study showed that:

1. Only 2 patients out of 100 who recieved the standard and the aggressive hydration developed post-ERCP pancreatitis.
2. Both patients who developed PEP were from the standard group with incidence of 2/50 (4%). No patients from the aggressive group developed PEP with no statistical significant difference between both groups.
3. Asymptomatic hyperamylasemia was observed in 35/100 (35%) patients who underwent ERCP, 21/50 (42%) of them from the standard group and 14/50 (28%) patients from the aggressive group.

4. No patients developed post-ERCP abdominal pain in both groups.
5. Younger patients (36.5 ± 0.7) years had higher incidence to develop PEP than older patients (53.3 ± 14.2) with statistical significant difference (P-value=0.049).
6. Difficult cannulation was a risk factor for development of PEP as patients who didn't have difficult cannulation (93.8%) didn't develop post ERCP pancreatitis with statistical significant difference (P-value=0.017).
7. There was no relation between the other known risk factors and the development of PEP in both groups.
8. There was statistical significant difference between both groups as regards the development of post-ERCP hyperamylasemia in patients who underwent sphincterotomy as 11/42 (26.3%) in the aggressive group versus 20/37 (54.1%) in the standard group (P-value=0.021).

There was no relation between the other known risk factors e.g.(female gender, patients younger than 40 years, baseline normal bilirubin, difficult cannulation and precut) and development of post-ERCP hyperamylasemia in both groups.