Perioperative management of haemophilia in patients undergoing major or minor surgery

S. BELKAID – M. BENSADOK – N. FERROUJ – H. MILOUDI – T. ZIDOUNI - M. TERCHI - N. SKENDER– N. ZIDANI – S. NEKKAL

Department of Haematology and Blood Bank - Beni Messous Hospital - Algiers

INTRODUCTION:

Surgical intervention may be necessary for patients with Haemophilia (H) in case of complications or following another illness. This major or minor surgery requires planning and multidisciplinary collaboration. It is essential to conduct a preoperative assessment for neutralizing antibodies and to establish an appropriate substitute therapeutic protocol in order to perform the surgical procedure safely.

OBJECTIVE:

To study the medical management before and after surgery in haemophiliacs patients undergoing surgery.

PATIENTS AND METHODS:

We conducted a retrospective study on 100 haemophiliacs patients followed at the Haemophilia treatment Center (HTC) who underwent surgical procedures; the following parameters were analysed: Current age, sex, age at surgery, severity of haemophilia, number of operated haemophiliacs, number of surgeries, type of surgery (major/minor), surgical indication (emergency/scheduled). titer of neutralizing antibodies (Pre/Post-Therapeutic Assessment), Substitutive protocol type, Hospitalization and duration, complications and progression.

RESULTS:

We collected data from 675 haemophiliacs patients, 100 of whom underwent surgical interventions, including 38 children and 62 adults.

Current average age: 31 years [3-82] Sex ratio 2F/98M=0.02 Average age for surgery 23 years [04 months - 76] Severity of (H): Severe 63 cases (63%) Moderate 14 cases (14%) Mild 23 cases (23%) Number of patients operated on 100: 93 cases (93%) under substitution protocol and 7 cases (7%) the diagnosis of Mild (H) was revealed following surgery. Number of surgeries 118, of which 16 patients underwent up to 3 surgeries. Type of surgery: MAJOR 65 (55%) of which 31 (26%) orthopaedic surgeries, 22 (19%) general surgery, 6 (5%) neurosurgery, 3 (2%) cardiovascular. MINOR: 53 (45%) dominated by circumcisions 32 (27%).

Surgical indication: urgent in 28 cases (23%), and scheduled in 90 cases (77%), The neutralizing antibodies: negative pre-therapeutic. (-) 102 cases (84%), positive (+) 16 cases (16%) post-surgery neutralizing antibodies (-) 100 cases (85%) neutralizing antibodies (+) 18 cases (15%) of which 2 cases tested positive post-surgery; Type of protocol Factor VIII (Plasmatic or recombinant) 91 cases, Agents by passing (aPCC/rFVIIa) 20 cases, Fresh frozen plasma 07 cases, Hospitalization: 73 cases, Average length of hospitalization 3 days [2-19], Complications: Bleeding 06 cases Infection in 3 cases, neutralizing antibodies positive in 2 cases post-surgery. Evolution: Good 98% Death rate 2% (1 case due to a postoperative infection (a few months later), 1 case secondary to neoplasia).

CONCLUSION:

The guarantee of an optimal outcome from surgeries in haemophiliac patients relies on good multidisciplinary collaboration and the availability of specific treatment; however, the cost of the latter remains very high, especially for patients with inhibitors.