

Managing major surgical operations in a large haemophilia centre in Northern India

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OBJECTIVES

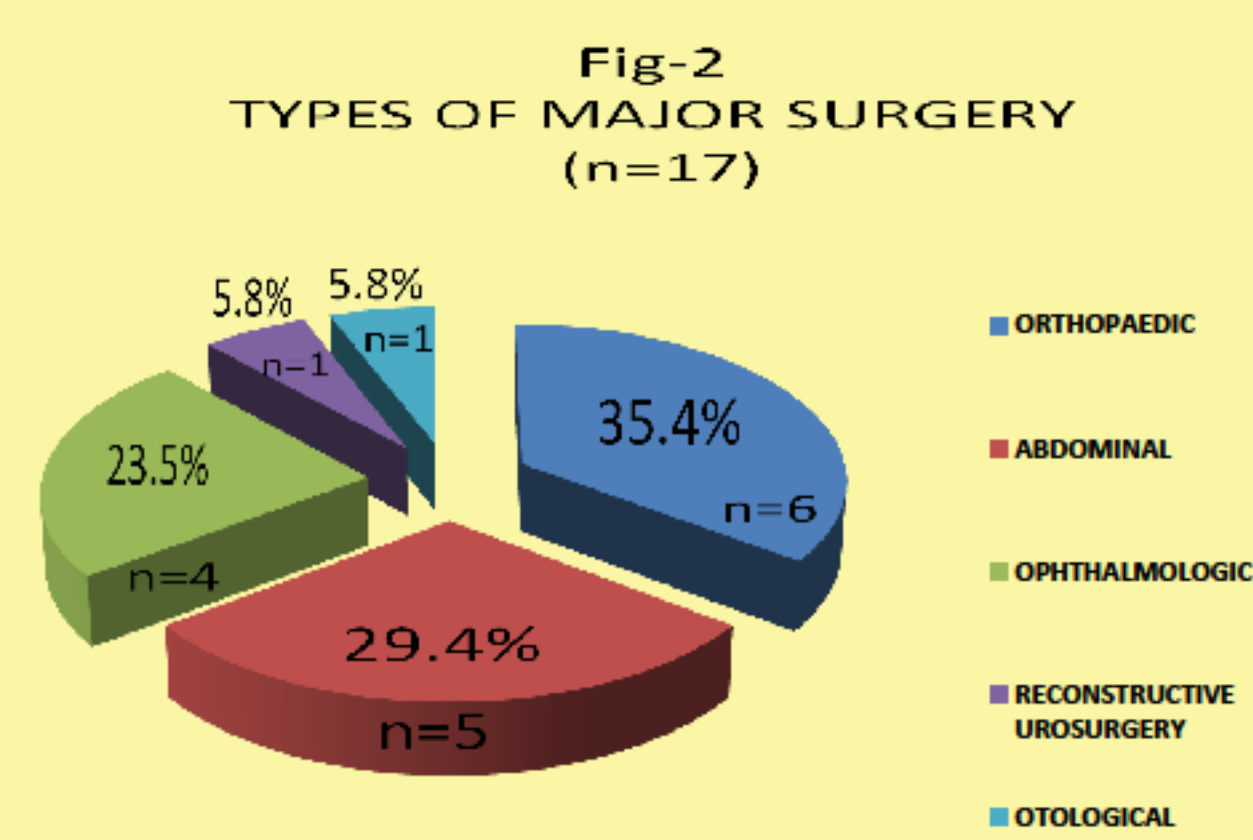
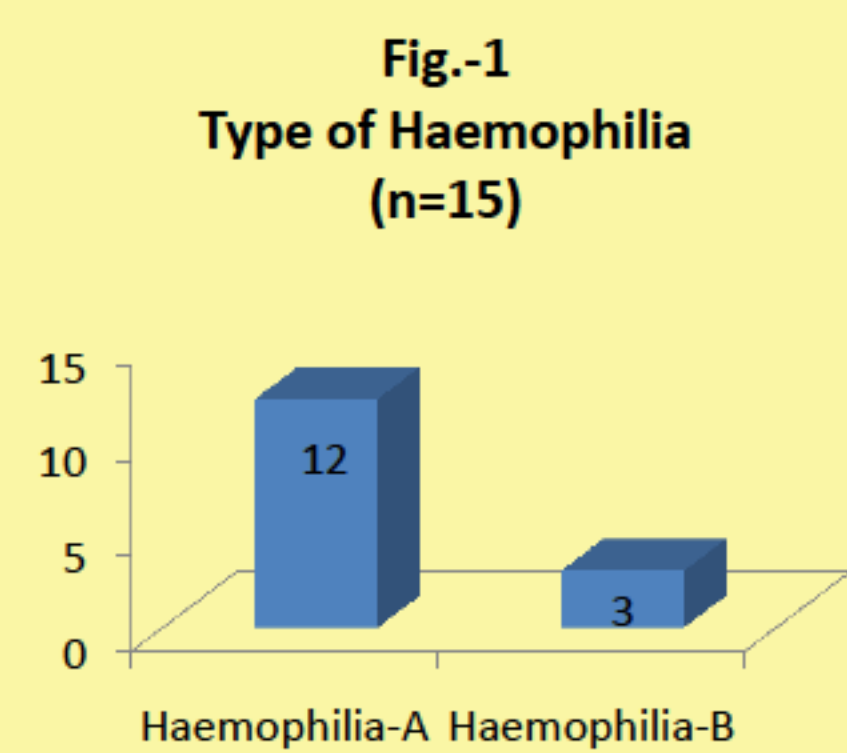
Our Haemophilia Centre in MAMC and LN Hospital is responsible for managing haemostasis support to operative surgeries in haemophilia. A review is being done to assess the haemostasis and haemophilia support in managing 17 major surgical operations in 15 patients with haemophilia to achieve sufficient haemostasis for the desired duration thus avoiding bleeding complications,, and view the use of antihemophilic factors (AHF) during different major operative surgeries.

METHODS

Out of current 1,156 patients registered in our haemophilia centre in New Delhi, 15 consecutive haemophilia patients who required 17 major surgical operations in our hospital during the past three years were included in this study. Detailed chart reviews were done on the indications for surgery, the operative procedure undertaken, the duration of hospitalization, and the haemostasis support with antihemophilia factors. We used the plasma-derived Factor VIII or Factor IX concentrate only apart from antifibrinolytic tranexamic acid.

OBSERVATIONS AND RESULTS

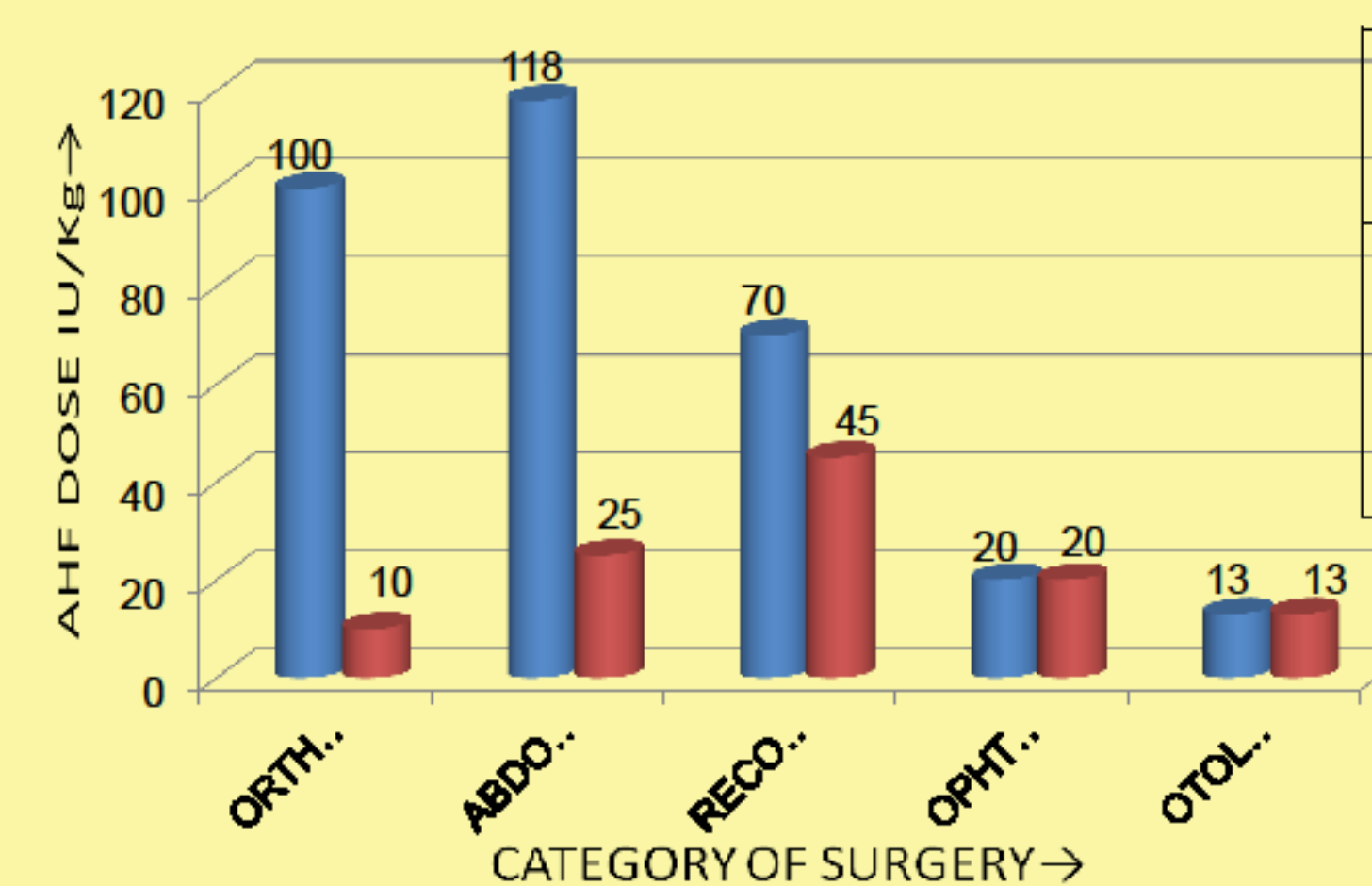
Twelve were haemophilia-A and the other three were haemophilia-B. All the patients were negative for inhibitor screening. Fourteen patients had a prior detailed work-up in haemophilia centre whereas remaining one was diagnosed post-operatively. After reassessment, patients were given AHF replacements pre- and post-operatively as per our protocol.



Out of 15 patients, 5 had abdominal surgery, 6 orthopedic surgery, 2 ophthalmologic surgery, 1 reconstructive urosurgery and 1 otological surgery. One child had three separate eye operations thus totaling 17 surgeries in 15 patients. All these operations required general anesthesia.

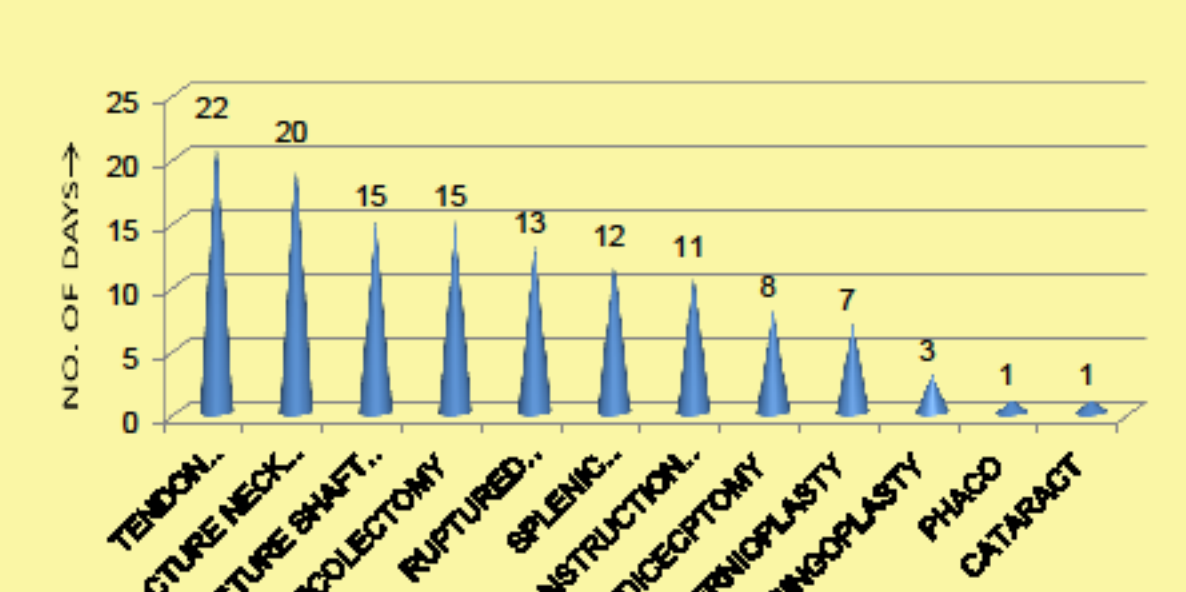
Total AHF requirement varied across the type of operations, ranging from 118 IU/Kg (for ruptured appendix) to 13 IU/Kg for ophthalmological, averaging 57 IU/Kg. The mean duration of hospitalization was 7 days (orthopedic surgery) to 1 day (eye surgery). AHF requirement was directly proportional to the extensiveness of surgery. There were no haemostatic inadequacies during the period nor were there any post-operative surgical complications. Details of AHF used and monitoring are presented.

Fig-3
AHF DOSE RANGE DURING A SURGERY (n=17)



	MEAN (IU/Kg)	RANGE (IU/Kg)
ALL SURGERY	57	13-118

Fig-4
DURATION OF HOSPITALISATION FOR MAJOR SURGERY (n=17)



1. Satisfactory outcome with adequate haemostasis	15
2. Deranged haemostasis not requiring additional AHF support	00
3. Deranged haemostasis requiring additional AHF support	00
4. Deranged haemostasis with complications	00
5. Other Morbidities	00
6. Other Mortalities	00

	MEAN	RANGE
ALL SURGERY	11	1-22

Successful haemostasis was achieved in all the instances, with no morbidity or mortality.

CONCLUSIONS

1. A good pre-operative evaluation followed by appropriate AHF replacement during the different phases of surgery results in successful haemostasis and outcome.
2. A firm diagnosis, and screening for inhibitors and other potential factors causing haemostatic alterations must be looked into pre-operatively.
3. The AHF requirement was directly proportional to the extensiveness of operative surgery.
4. All major surgeries should meet an outcome no different from non-haemophilic patients provided a dedicated haemophilia staff infuses surgical confidence.

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