

TREND OF COMPLICATIONS FOLLOWING PEDIATRIC CIRCUMCISION IN MALAYSIA DURING DECEMBER 2022

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INTRODUCTION

- Circumcision is the commonest surgical procedure undergone by Malaysian boys with 61.4% of Malaysians are estimated to be circumcised¹.
- A plethora of complications may arise from this presumably simple procedure from bleeding and wound infections to more serious complications such as penile necrosis and glans amputation² with an incidence of complications range from 2-14%³.
- However, to date there are no published studies on pediatric circumcision complications in Malaysia.
- We aim to study the trend of complications following pediatric circumcision in Malaysia encountered during the school holiday month of December 2022.

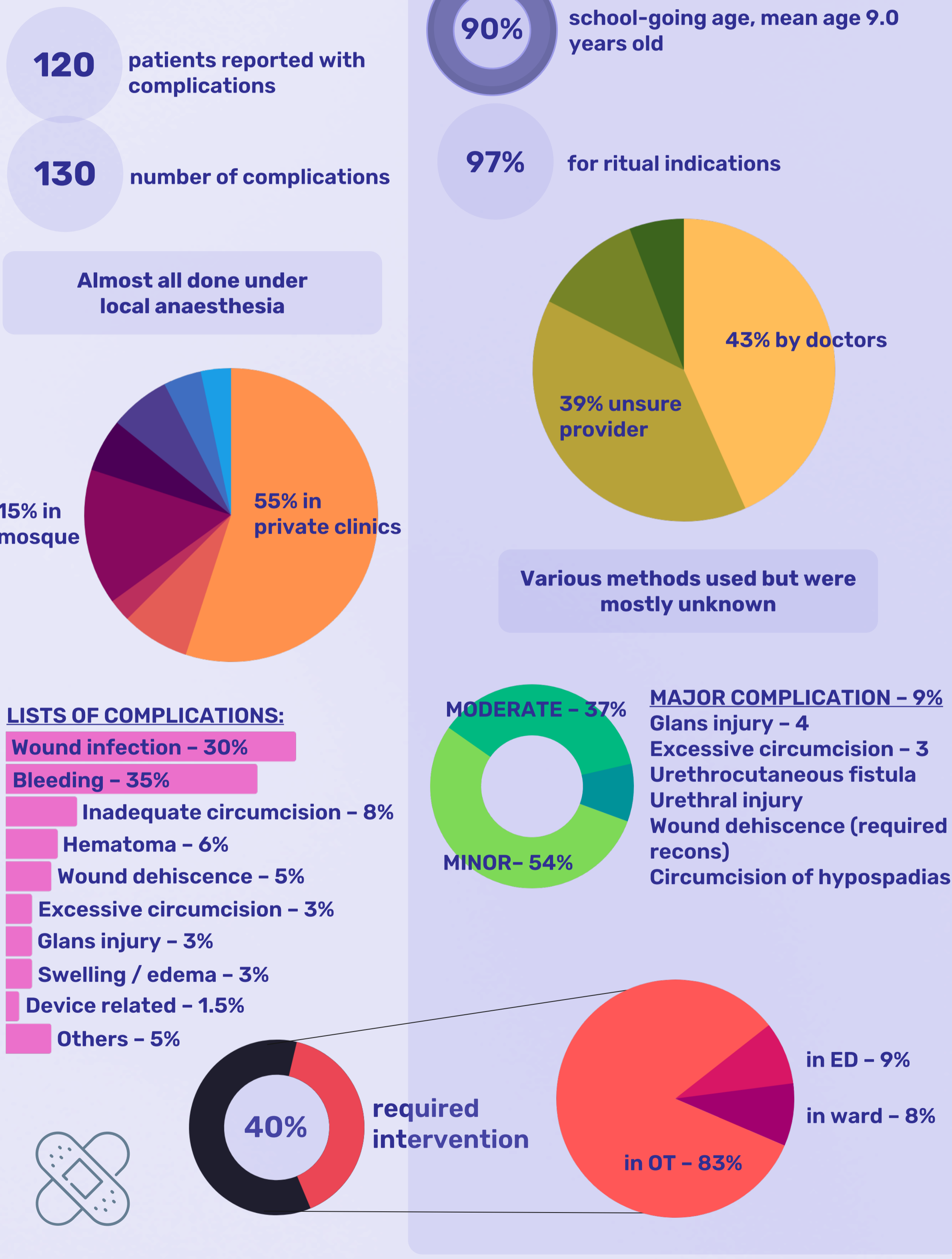
METHODOLOGY

- Study type: Retrospective study
- Study duration: 1st – 31st December 2022
- Study population: All patients with circumcision complications presenting to 13 centers under the Ministry of Health with pediatric surgical services.
- Study variables: age, details of circumcision practice (date, place, indication, type of anaesthesia, provider, method, device used), details of complication (date of presentation, health facility of presentation, diagnosis, need for intervention, site of intervention, type of intervention, date of discharge).
- Complications were classified according to severity as per Table 1.

TABLE 1: CLASSIFICATIONS OF COMPLICATION

TYPE	DEFINITION	EXAMPLE
Minor	Required no intervention	Bleeding not needing suturing, hematoma, wound infection, edema
Moderate	Required intervention at the time of study or later	Bleeding needing suturing, inadequate circumcision
Major	Potentially life-threatening or life-long morbidity requiring intervention at time of study or later, including plastic surgery or reconstruction	Glans injury, excess circumcision, circumcision in hypospadias

RESULTS



13 participating centers:

- Hospital Tunku Azizah, Kuala Lumpur - 17 cases
- Hospital Sultanah Nur Zahirah, Kuala Terengganu - 17 cases
- Hospital Melaka - 13 cases
- Hospital Tengku Ampuan Rahimah, Klang - 10 cases
- Hospital Sultanah Aminah, Johor Bharu - 10 cases
- Hospital Tunku Jaafar, Seremban - 9 cases
- Hospital Raja Perempuan Zainab II, Kota Bharu - 9 cases
- Hospital Wanita Dan Kanak-kanak Sabah, Kota Kinabalu - 8 cases
- Hospital Sultanah Bahiyah, Alor Setar - 8 cases
- Hospital Pulau Pinang - 6 cases
- Hospital Raja Perempuan Bainun, Ipoh - 6 cases
- Hospital Umum Sarawak, Kuching - 4 cases
- Hospital Tengku Ampuan Afzan, Kuantan - 3 cases



CONCLUSION

- This study provided a short glimpse but alarming trend of pediatric circumcision complications in Malaysia.
- The majority of complications reported arising from patients having circumcision done in private clinics and by medical personnel are worrying.
- Although most complications are minor, a few not insignificant major complications were reported with potentially long-term morbidity.
- Long-term prospective study is needed to understand the prevalence of complications as a stepping stone for effective recommendations to limit complications.

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