CONCURRENCE OF LATE POST-TONSILLECTOMY BLEED AND DENGUE FEVER IN A 17-YEAR OLD FEMALE: FIRST REPORTED CASE

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INTRODUCTION

Among the pediatric age group, various surgeries are done on a day to day basis with very good success rates. Tonsillectomy is one of the most commonly performed procedures by otolaryngologists with only 1-4% of bleeding rates, majority occurring on the first two weeks after the surgery. Dengue, on the other hand, have been increasing in prevalence over the past decades, making Philippines dengue endemic. But despite having two common cases, there is limited, if not none, in publicly accessible online reporting both dengue and post-tonsillectomy hemorrhage occurring at the same time. As an otolaryngologist practicing in a dengue prone area, it is prudent to consider that this is a possibility that patients may face and necessary prevention should be done to avoid the unnecessary morbidity and mortality.1,2

METHODS

Design: Case Report
Setting: Tertiary Government Hospital
Patient: One case of a 17-year old Filipino female presenting with concurrent late post-tonsillectomy bleed and dengue fever

RESULTS

A 17-year old previously healthy female underwent elective tonsillectomy in a tertiary government hospital with unremarkable peri-operative periods. However, the patient was re-admitted twenty days after the procedure due to Dengue Fever and was noted to have the first episode of tonsillar bed bleed thereafter. Despite aggressive medical management at the PICU, patient’s condition worsened with multiple bouts of massive hematemesis and expired due to hemorrhagic shock.

DISCUSSION

Post-tonsillectomy bleed is categorized into three. Early/primary bleeding, which occurs during the first 24 hours after operation, is considered to be directly related to the surgical technique. Delayed/secondary bleeding, occurring on days 1-10 is usually due to sloughed off eschar, most commonly on days 2-7. Late bleeding which occurs beyond 10 days is least common, and is considered to be due to secondary factors not directly related to tonsillectomy, as seen in this case.3,4

Dengue, on the other hand, is a viral infection caused by strains belonging from Flaviviridae family. It is endemic and occurs year-round in the Philippines, including urban and peri-urban areas, with a morbidity rate of 198 per 100,000 populations. Hemorrhage and/or pulmonary congestion from fluid overload on convalescent or Critical Phase remains to be the common cause of mortality. Total census in 2016 is 69,297. Incidence of dengue in Region VI where the index case is residing is 5,268 in 2016, making her one of the many at risk but unlucky enough to contact dengue just less than a month after her surgery and eventually bled to death.5,6

CONCLUSION

Although it is very unfortunate that the index case expired, her death will not be in vain as this will put otolaryngologists’ perspective that a late post-tonsillectomy bleed and persistent fever with no other focus in an otherwise unremarkable patient could be dengue. And with proper appraisal that there is a risk of acquiring such virus post-operatively, especially during an outbreak, the patient and the family can be vigilant enough to seek consult as early as possible and the mortality and morbidity due to unexpected post-surgical bleeding will be reduced.

REFERENCES

3. Dadgarnia, M. H., Aghaei, M. A., Atighechi, S., Behniafard, N., Vahidi, M. R., Meybodian, M., ... & Ansari, A. (2016). The significance of tonsillectomy bleed and persistent fever with no other focus in a single patient written in English, publicly accessible online (PJOHNS, HERDIN, MeSH, Elsevier’s Search Engine: Clinical Key, Google Scholar). The vast majority of medical data uploaded in the internet that may eventually bled to death.5,6
4. As of this writing, there is no previously published case of concurrent late post-tonsillectomy bleed and dengue fever in a single patient written in English. A Google Scholar search for “DENGUE FEVER IN A 17-YEAR OLD FEMALE: FIRST REPORTED CASE” produces nothing relevant.
6. Id, which occurs during the first 24 hours after operation, is considered to be directly related to the surgical technique. Delayed/secondary bleeding, occurring on days 1-10 is usually due to sloughed off eschar, most commonly on days 2-7. Late bleeding which occurs beyond 10 days is least common, and is considered to be due to secondary factors not directly related to tonsillectomy, as seen in this case.3,4
7. Figure 1. High-power field (above) and low-power field (below) views of the histopathologic specimen of the patient’s tonsils after tonsillectomy showing lymphocytes consistent with chronic hypertrophic tonsil.
8. Figure 2. Low-power field view of the common Aedes aegypti mosquito, a known carrier of dengue virus from Flaviviridae family. As per WHO definition, dengue can be divided into probable dengue without warning signs, dengue with warning signs and severe dengue, to which the patient manifested signs indicating the latter and later succumb to death.