# "BABY SHOCK DU, DU, DU…"

# A CASE OF A CHILD WITH UNSTABLE ATRIAL FIBRILLATION

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## INTRODUCTION

Atrial fibrillation in children is uncommon in absence of cardiac pathology. Child with AF commonly presented with lethargy, rapid breathing, poor oral intake and less active. These presentations may be masked with sepsis or lung infections if proper history and examination was not done.

## CASE PRESENTATION

5-month-old baby presented with rapid breathing, reduced oral intake and less active. Mother denies any cough, fever or runny nose nor GI symptoms. Child had no significant paediatric history and no history of hospitalization.

Child was lethargic with respiratory rate of 65/min. Pulse volume good but irregular. Lungs clear but heartbeat was fast and irregular with SPO2 99% under room air. ECG showed heart rate 204 bpm, irregular rhythm with narrow complexes. HFM 15Lmin was given and referred to Paediatric team. Case was discussed with Paediatric Cardiology Serdang and decided for IV Adenosine x2 but not responsive. Hemodynamically was unstable thus proceeded with synchronized cardioverted twice but atrial fibrillation still persistent. Child was then intubated, stabilized and was started on IVI amiodarone. Subsequently, he was transferred to PICU HTAR.

## DISCUSSION

Children with tachyarrhythmias may present with less active, lethargy, poor oral intake, palpitation, chest pain and rapid breathing. The incidence of AF in paediatrics is rare (prevalence <0.05% prior to the age of 30) Isolated AF, in the absence of underlying cardiovascular disease, represents less than 5% of all cases of AF.

Vital signs in children are different according to age. Each age group have different range of vitals sign according to age. Management of child with tachyarrhythmias depends on hemodynamically stability of the patient. Synchronized cardioversion (0.5-1j/kg) are done with hemodynamically unstable patient. stable patient can be treated with vagal manoeuvres, adenosine (0.1-0.5mg/kg) and ice pack compression. Amiodarone may be given if persistent tachyarrhythmia.

## CONCLUSION

Detailed assessment is required in paediatric patients to ensure actual pathology was not missed. Understanding normal range of vital signs in different age groups are important. AF in children caused by multiple factors but lone AF in children is rare. Cardioversion in children is due if child is hemodynamically unstable.

**KEYWORDS:** Atrial fibrillation, Paediatrics, Synchronized cardioversion