Lightning strike with cardiac rhythm recorded, the first time to witness lightning effect on the human heart

[a]i Altalhi,[a] Waleed Al-Manea,[b] **Naif Alqweai**,[c] Mohammed Alothmand

Pediatric cardiology, heart center, king faisal specialist hospital, Riyadh, Saudi Arabia.

Corresponding author: Dr. Naif AlQweai, Email: dr_naifalqweai @Hotmail.com

Introduction

- Light and thunder strikes are very dramatic natural phenomenon that tends to capture attention.
- Lightning strikes the earth approximately 8000000 times/day.
- The degree of injuries varies from self-limiting skin manifestation to cardiac arrest and death.
- For obvious reasons it's difficult to assess the direct effect of the lightning on the human heart, because the event is sudden and unpredicted.

Case report

- In this case report a 16 year old boy who had implantable loop recorder subcutaneous cardiac monitor, in September, 2015 because of severe form of neurocardiogenic syncope, was hit by light strike together with four other friends during picnic in desert. Two of his friends died in spot. He fainted for few seconds, and then woke up spontaneously.
- For the first time ever a rhythm strip was recorded live during the strike.
- The loop recorder (Reveal linq, Medtronic) was analyzed, and showed the rhythm changes that occur during the strike, and recorded from beginning to the end (figure 1).
- Immediately after strike, ventricular fibrillation noted that last for few seconds only which changed to polymorphic ventricular tachycardia again for few seconds, and finally to monomorphic ventricular tachycardia, before it spontaneously reverted to sinus rhythm.

