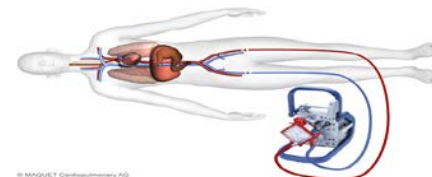
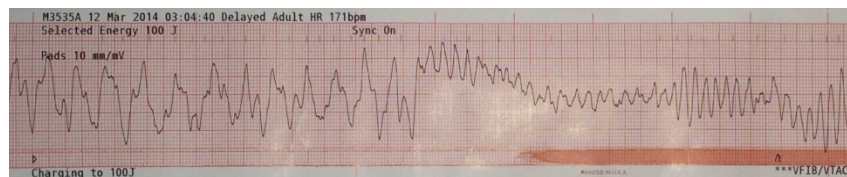


➤ Introduction

- Dust-Off® computer cleaner containing 1,1-difluoroethane (DFE) is frequently cited in cases of inhalation abuse.
- Malignant cardiac dysrhythmias are a well-recognized complication of DFE toxicity.
- We describe a patient with prolonged ventricular irritability following DFE inhalation, who was successfully treated with a central α -2 agonist and extracorporeal membrane oxygenation (ECMO).

Discussion

- Fatal dysrhythmia associated with inhalational abuse of hydrocarbons is often described as "sudden sniffing death".
- Inhaled hydrocarbons may sensitize the myocardium to catecholamines.
- Peripheral sympatholysis using β -blockers may be a treatment option.
- Central α -2 agonists (e.g. clonidine) have been utilized for sympatholysis.
- DEX is a central α -2 agonists that has an indication for sedation.
- ECMO has been utilized to support perfusion until cardiotoxicity resolves.



Case Description

- A 23-year-old alcoholic with symptoms of EtOH withdrawal, self-medicated by inhaling Dust-Off®.
- She had a witnessed seizure followed by a pulseless ventricular tachycardia (VT) arrest.
- She demonstrated severe ventricular irritability with frequent recurrent VT. Echocardiography (Echo) demonstrated an ejection fraction (EF) of 5%.
- Sedated with dexmedetomidine (DEX)
- Treated with an esmolol infusion and therapeutic hypothermia.
- Received extracorporeal membrane oxygenation (ECMO).
- After one week her EF was 65% and ECMO was discontinued. On hospital day 27 she was discharged to a rehabilitation facility.

Conclusion

- Central α -2 agonism may be considered as an adjunct therapy to decrease sympathomimetic output.
- ECMO may be considered for supportive care for cardiotoxicity associated with inhalation abuse.