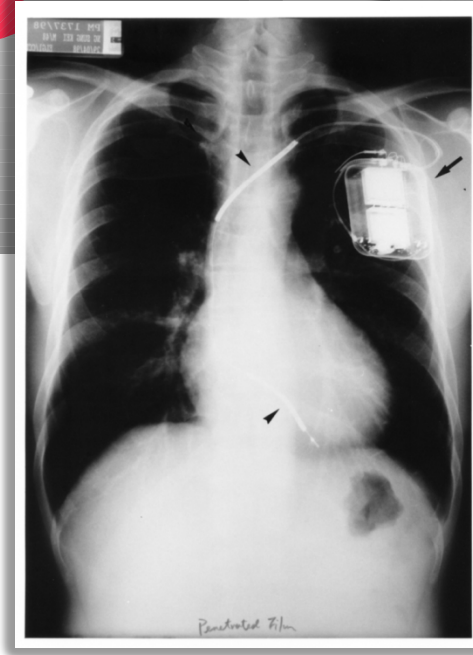
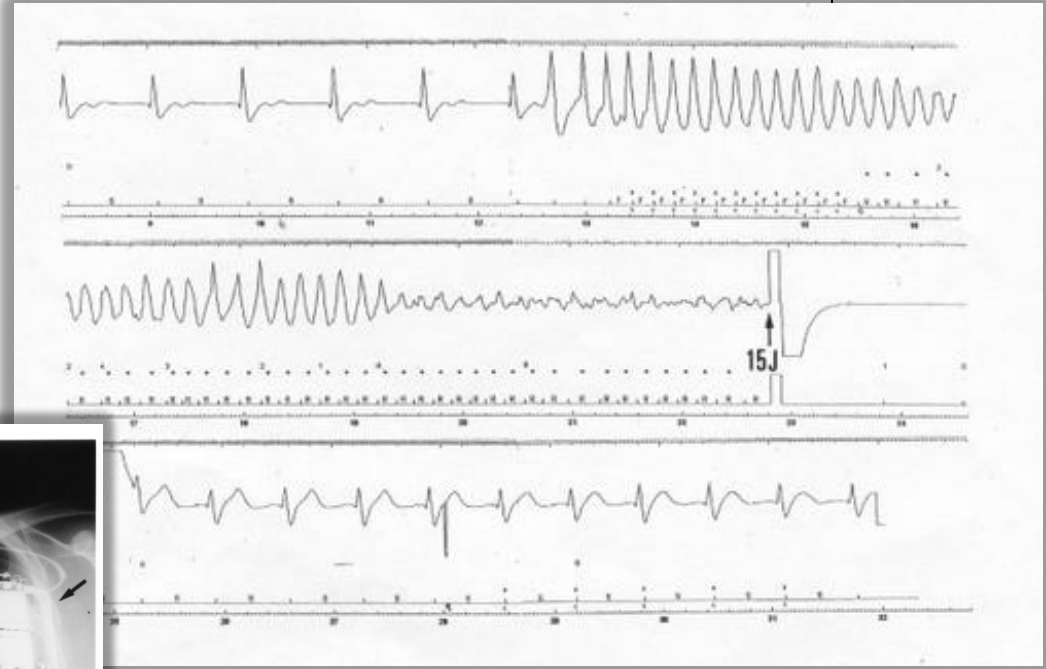
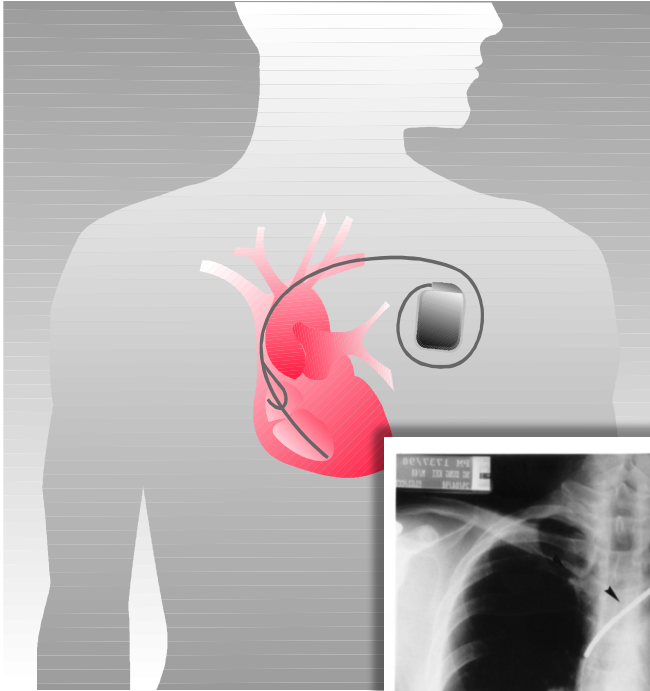
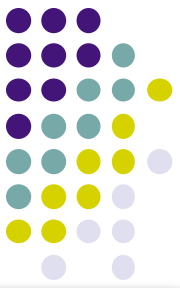


ICD implantation for patients with VT/VF and underlying heart diseases



ICD shock successfully terminated a VF in patient with Brugada syndrome

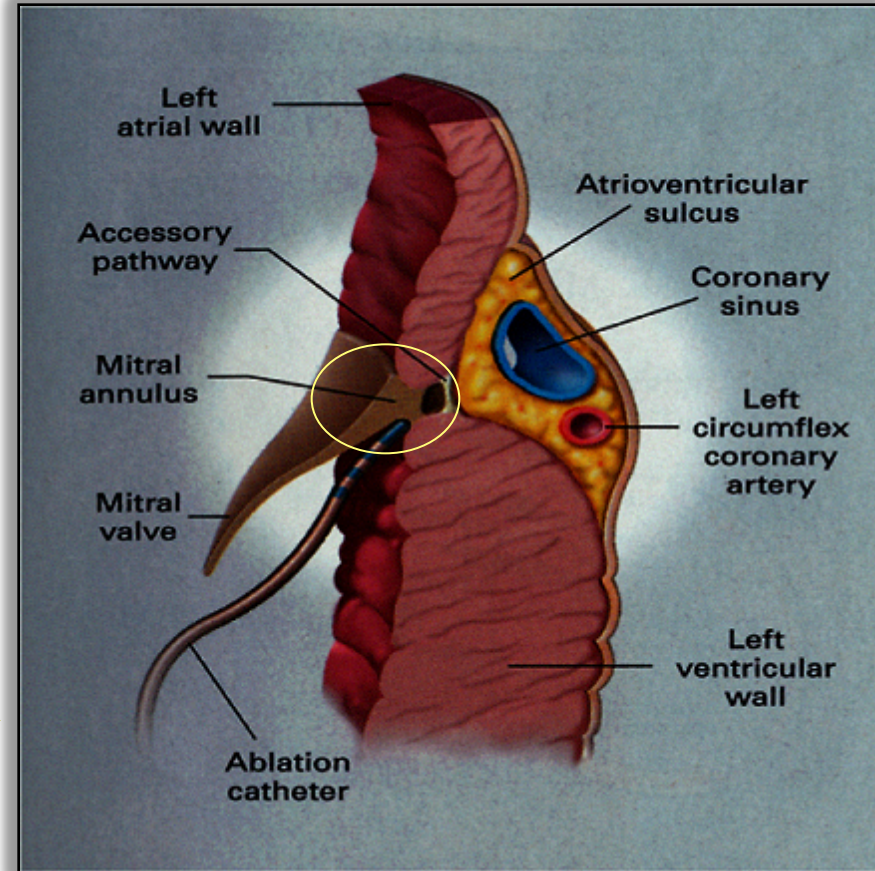
WPW syndrome



RF ablation of accessory pathway



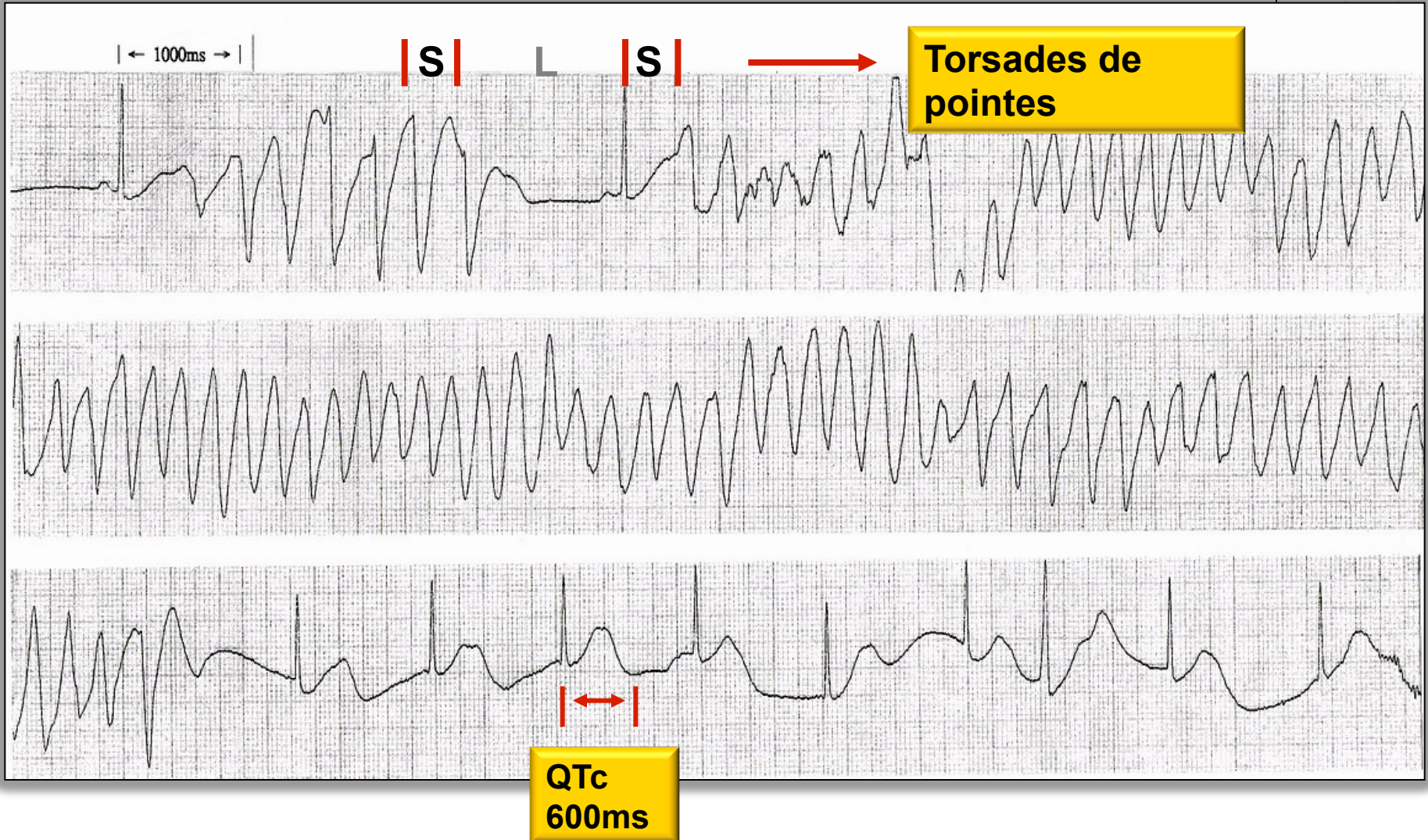
Delta wave



Non-cardiac cause of VT/VF



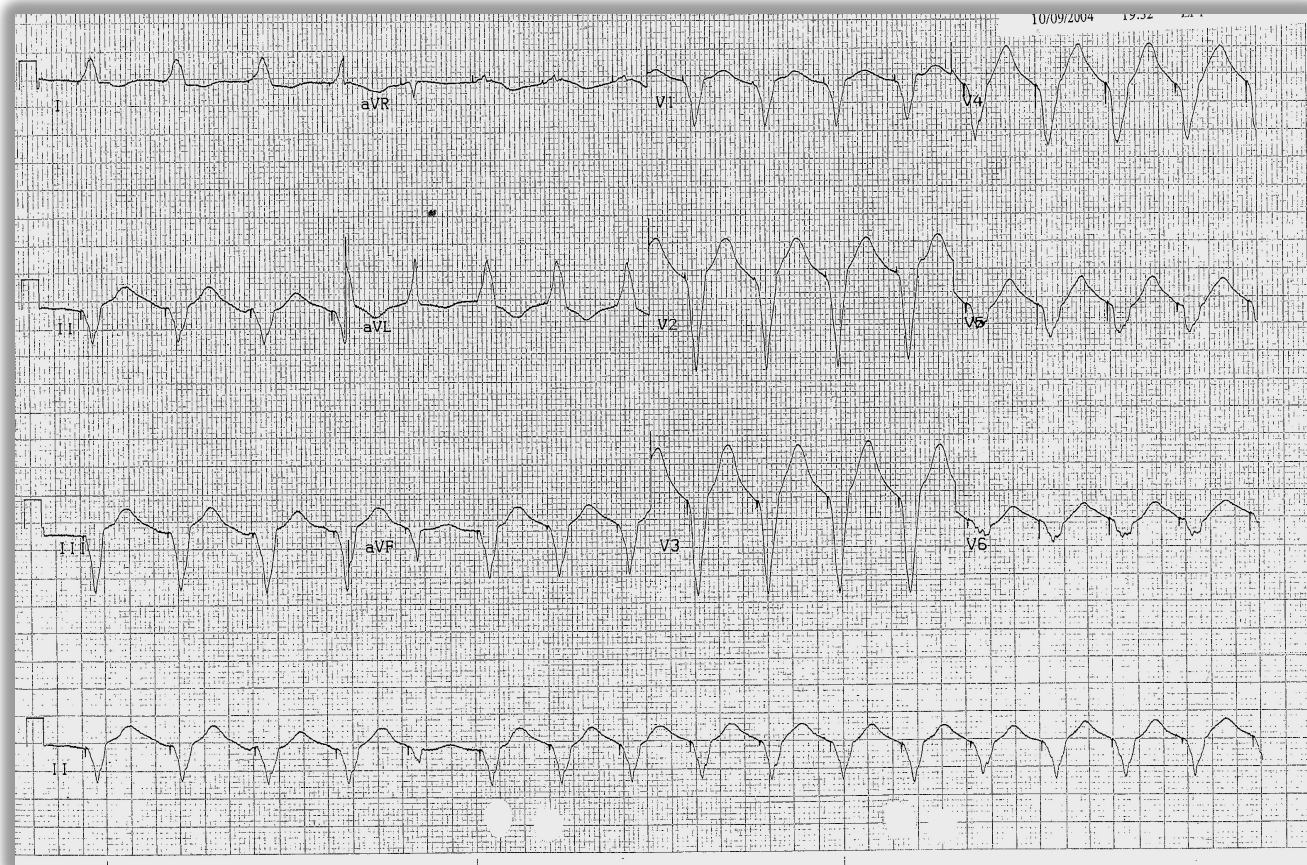
Acquired Long QT syndrome caused by ketoconazole



Management of drug-induced Long QT syndrome

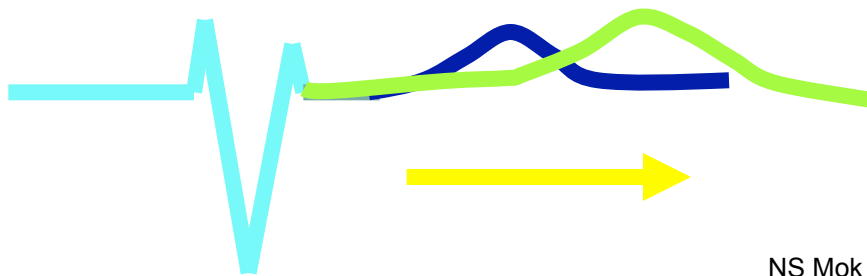


- TdP suppressed by IV MgSO₄ & transvenous temporary pacing at 100 beats/min



www.torsades.org

QT-interval Prolonging Drugs



NS Mok

Antiarrhythmic Drugs

Class IA

Quinidine, Procainamide
Disopyramide

Class III

Sotalol, Amiodarone

Antibiotics

Erythromycin, Trimethoprim &
Sulfamethaxazole,
Pentamidine,
Clarithromycin, Azithromycin

Antihistamines

Terfenadine, Astemizole,
diphenhydramine

Antifungal

Fluconazole, Ketoconazole

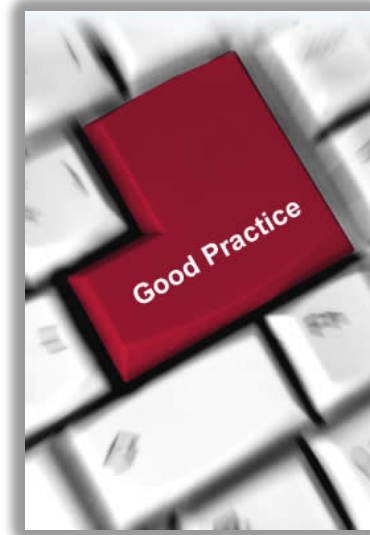
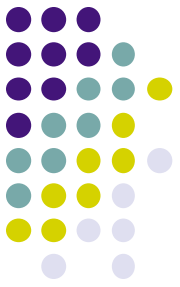
Antimalarial

Chloroquine, Halofantrine

Antipsychotic Drugs

Haloperidol, Tricyclic
antidepressants

Good Practice to Avoid Drug-induced Long QT syndrome



Avoid QT-prolonging drugs in patients at risk of TdP

Avoid >1 QT-prolonging drug at the same time

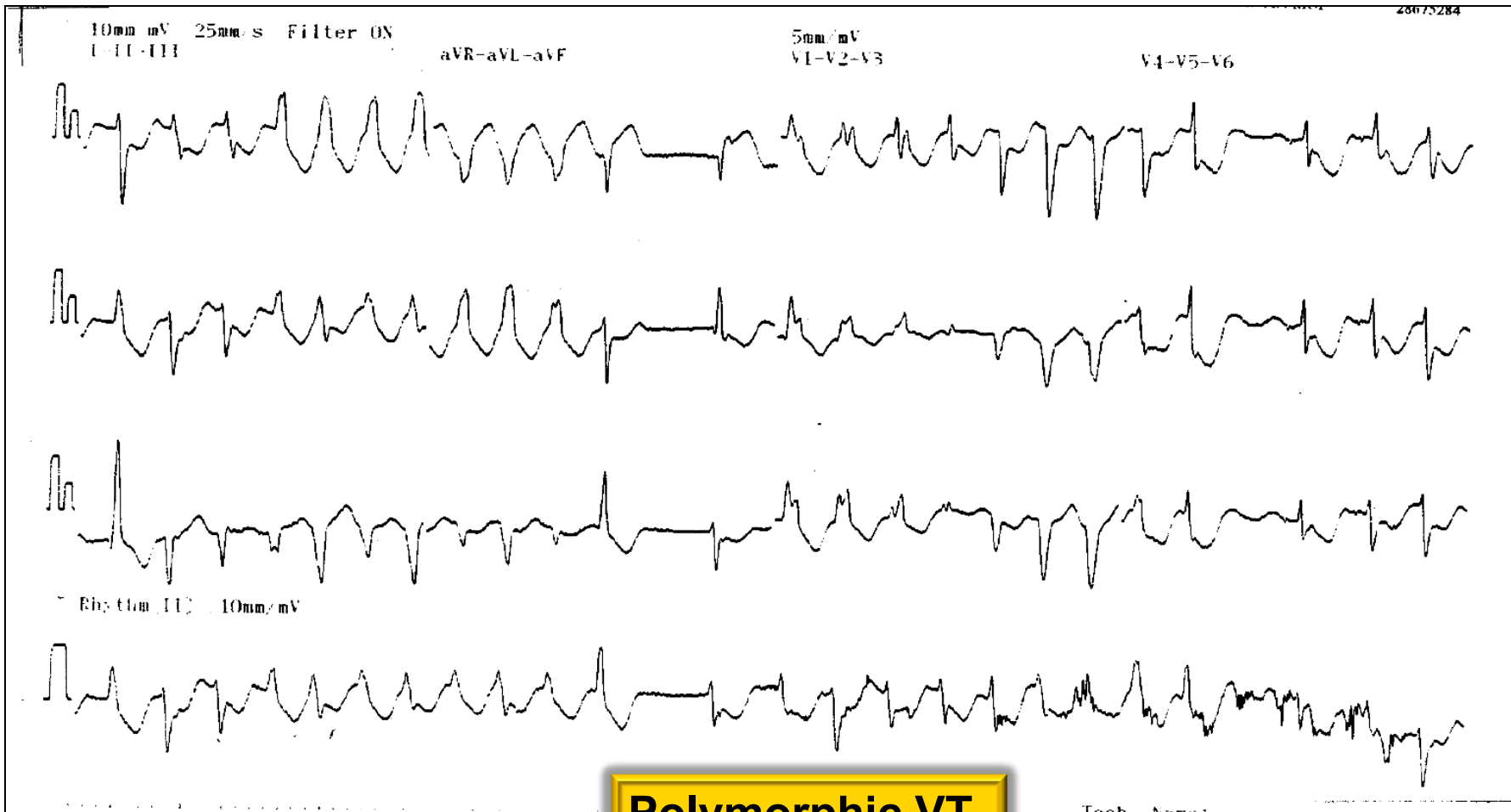
Cardiac & QTc monitoring in the first few days when giving QT-prolonging anti-arrhythmic drugs to at-risk patients

Avoid hypokalaemia in patients receiving QT-prolonging drugs

Non-cardiac cause of VT/VF



Aconitine poisoning



Polymorphic VT

Tech Name:

Aconitine Poisoning

Aconitine poisoning due to consumption of 川烏 / 草烏 is the most common cause of severe herbal poisoning in HK

Aconitines are cardiotoxic



川烏



服中藥「烏頭」 2年10宗中毒

【本報訊】服用中藥要小心，過去兩年有10人服過可致命的中草藥「烏頭」後中毒，一人幾乎斃命。調查發現，4人的藥方實不含此藥，懷疑是烏頭被參雜其中。

中醫指烏頭令人中毒的機會甚高，促政府監管中藥成分，以免禍及開此藥的註冊中醫。

疑被參雜 1人險斃命

《香港醫學雜誌》報道，04年3月至06年5月期間，醫管局毒理學參考化驗室共確認了10宗烏頭中毒個案，當中4人的藥方並不含有烏頭類藥材，但小便及藥渣卻驗出烏頭鹼，懷疑是在採集、炮製、運輸或儲存過程中參雜烏頭，其中一人幾乎致命。

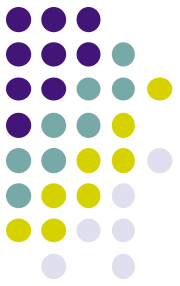
研究指出，烏頭中毒會出現皮膚異常刺痛、口及四肢麻痺、身體軟弱無力，嚴重中毒可令心律失常而致命。

醫院管理局香港中毒諮詢中心高級醫生謝萬里表示，烏頭鹼是最常引致急性中毒的中藥，出事者一般用以治腰、背及膝痛，亦有人浸酒，一般康復後無後遺症。

註冊中醫師李爾漢引述《中國藥典》指，烏頭用量應介乎1.5至3克，過量會中毒。藥用烏頭要經炮製減低毒性，服用時亦要「久煎煎煎」，即煲藥前先煲烏頭，再放入其他藥，然後再煲兩至三小時，否則都有機會中毒。

他直言，由於中毒機會高，故他不開此藥，並促請政府監管中藥成分，避免參雜有毒物，連累註冊中醫。

Mx of arrhythmia due to aconitine poisoning



No specific antidote

Supportive treatment

Gastric lavage useful if presentation within 1 hour of herb ingestion

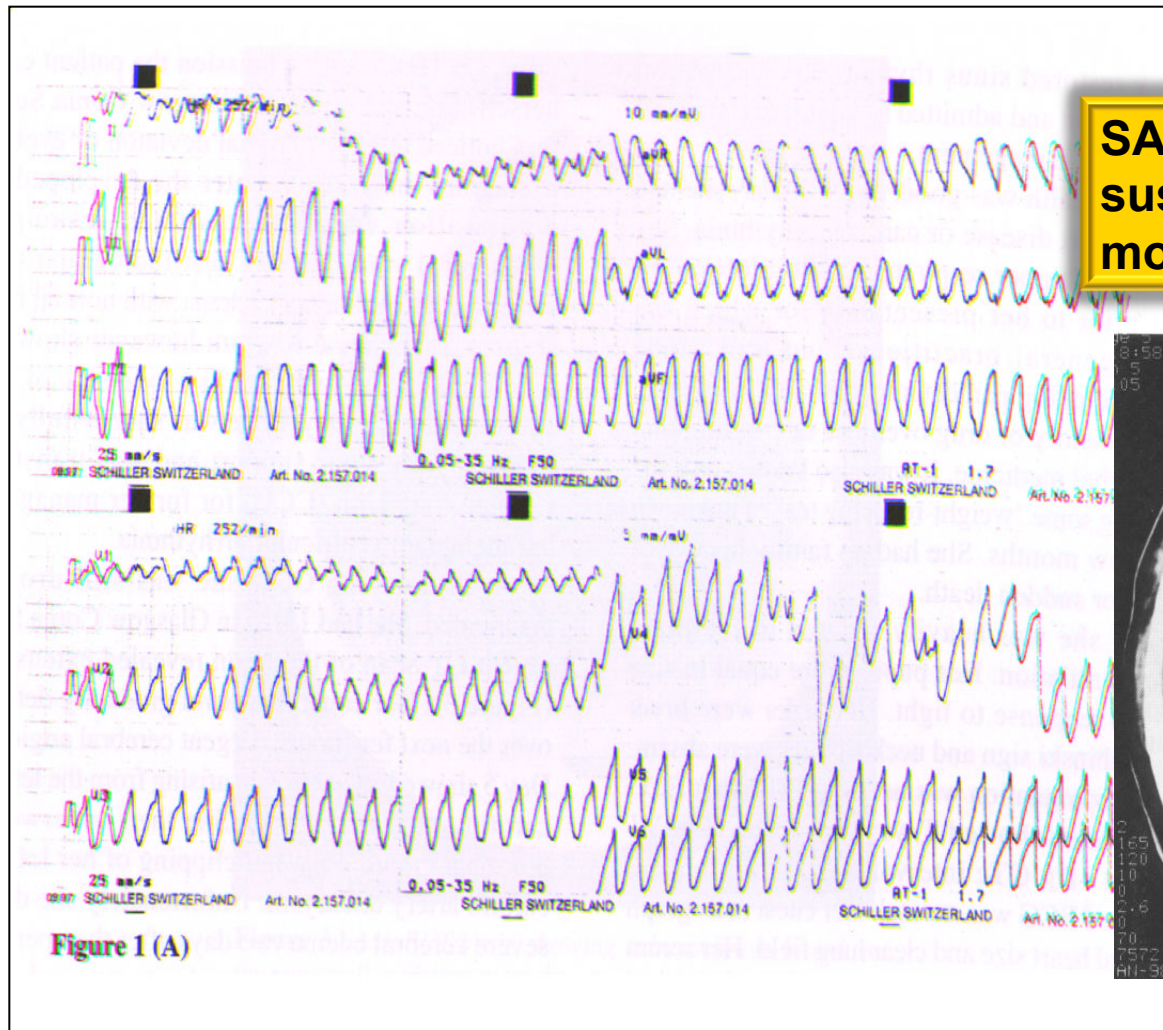
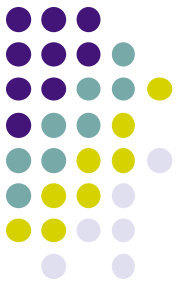
Bradyarrhythmias:
atropine or pacing

VT / VF: flecainide,
lignocaine, amiodarone

Save urine and blood and retrieve herb samples for toxicology screening

Non-cardiac cause of VT/VF

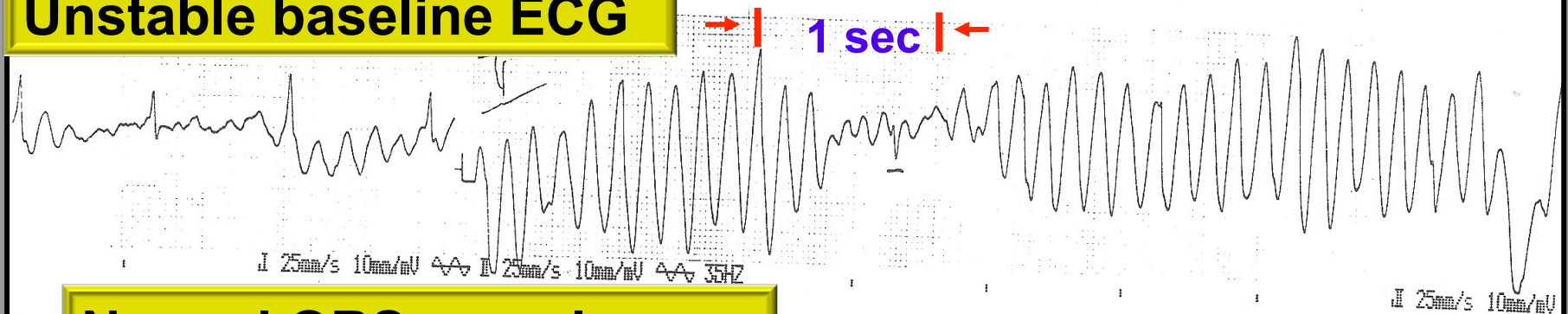
Intracranial haemorrhage



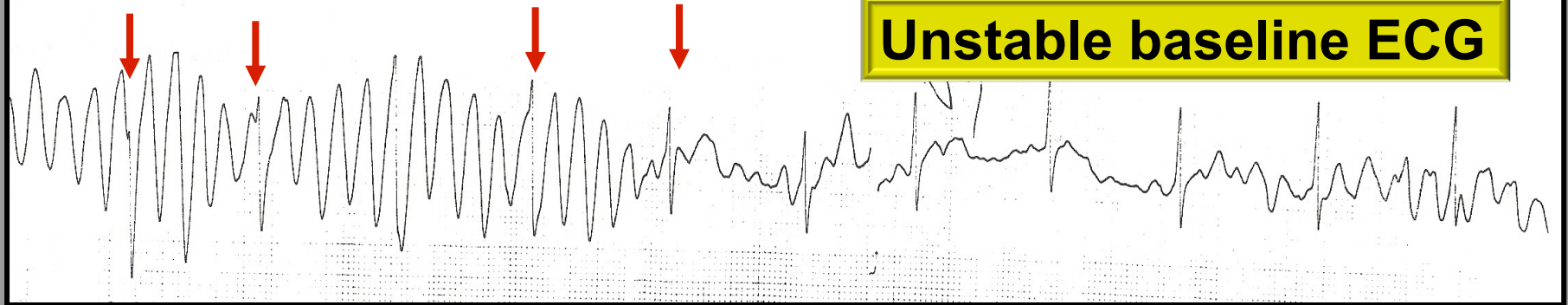
SAH presenting as sustained monomorphic VT



Unstable baseline ECG



Normal QRS complexes



Unstable baseline ECG

ECG artifacts mimicking polymorphic VT in a patient with parkinsonism