The purposes of this study were:
1. To identify, promote and chart outcomes of interventions due to drug interaction challenges in which patients were treated with Amiodarone.
2. To demonstrate that drug interactions could occur when Amiodarone is administered by IV single dose.
3. To draw up advice for clinical management of potential drug interactions due to treatment with Amiodarone.

The drug Amiodarone has a complex pharmacokinetic profile resulting in a challenge due to drug-drug interactions:
- Substrat of CYP3A4.
- Inhibitor of CYP1A2, CYP2C9, CYP2D6, CYP3A4
- Inhibitor of the transportpump P-glycoprotein (Pgp).
- Long T½ for both drug and active metabolite Desethylamiodarone - even after only IV single dose.

Results

- 25 patients were included.
- Pharmacist had 54 inputs in which 41 (72%) were taken into account.
- 36 different drugs with potential of drug interactions were registrated.
- 66% of the inputs involved four of the 36 drugs; statins, warfarin, metoprolol and digitoxin.

Warfarin and Amiodarone IV dose

INR value as a function of time. Two single IV doses of Amiodarone were given to a patient who had been treated with Warfarin.

Patient just started up Warfarin treatment. One single dose Amiodarone IV was given; unstable INR-values resulted in prolonged stay in hospital.

Advice for Clinical management of potential drug interactions due to treatment with Amiodarone.
- When patient are admitted from other hospitals and recently are treated with Amiodarone, note in medication curve due to long T½s.
- Warfarin: Reduce to half dose. Follow up INR values!
- Digitoxin: Digitoxin: Reduce to half dose.
- Simvastatin: Not doses above 20mg or switch to alternative statin.
- Atorvastatin: No definite recommendation in literature. Max 40 mg.
- Metoprolol: Adjust the dose to bradycardia.
- Discharge summaries: Always explain to GP why it is important to follow up due to treatment with Amiodarone.

Conclusion

The recommendations of further management of DD-interactions in hospital with Amiodarone was endorsed by the lecturer cardiologist.