Synchronized Cardioversion

PROCEDURE

STEPS

1. Obtain a 12-lead before cardioversion; if conscious, explain the procedure to the patient
2. If time permits, consider Procedural Tolerance (see Pearls for dosing on the original)
3. Attach ECG electrodes and record baseline rhythm strip(s); select the lead with the tallest R wave
4. Apply conductive gel or attach multi-function pads; select the appropriate energy setting
5. Activate synchronized mode; observe synchronization markers on the R wave
6. Charge the defibrillator and clear the patient
7. Call CLEAR and look up and down the patient to assure the patient is clear
8. Press the discharge buttons simultaneously and hold until discharge; reassess patient and rhythm, repeat if indicated

IF IT GOES WRONG

- Exercise safety precautions at all times
- Cardiovert with extreme caution in patients on digitalis, beta blockers, and calcium channel blockers
- Press and hold the shock button to ensure synchronization

BEFORE YOU START

- Indication: unstable tachydysrhythmias — V-tach (rapid, regular, wide bizarre QRS), Torsades (complexes appear to be twisting), SVT (rapid, regular, narrow QRS)
- Unstable signs: altered mental status, loss of consciousness, shock, hypotension with symptoms, pulmonary edema, poor perfusion
- Other signs listed: JVD, peripheral cyanosis, rales, diaphoresis, hypoxemia, chest pain, palpitations, shortness of breath, dizziness, weakness, nausea, anxiety
- A patient is unstable whenever ventricular tachycardia causes hemodynamic instability

KIT YOU NEED

- Energy, adults: 100 J sequence (100, 150, 200, 200) for one rhythm column on the original
- Energy, adults: 50 J sequence (50, 100, 100, 100) for the second rhythm column on the original
- Pediatric energy: refer to Handtevy
- Conductive gel or multi-function pads; ECG electrodes

Take Home Message:

Unstable tachydysrhythmia gets synchronized cardioversion: sync on, markers on the R wave, CLEAR called and checked, press and hold.