00:00:07 Faculty

So I'm going to hand over to you.

00:00:09 Faculty

Yeah. So I think you know a bit abut Winston. So just to recap, he was at home, he was on antibiotics for UTI.

00:00:18 Faculty

And then his wife found him collapsed, so he came into ED. He was quite sick at that time and low GCS.

00:00:25 Faculty

They did do a CT scan at that time and that was all normal.

00:00:29 Faculty

But low GCS, he was tubed.

00:00:31 Faculty

He came to ITU. He was on quite a lot of isotropes but they've been weakened down now and he is on four of noradrenaline now. And actually his blood pressures been quite good, about 75 means.

00:00:43 Faculty

Respiratory wise, we've actually weened him really quite well. So he's on by level, he's 16 / 5. He's only on 30% now.

00:00:50 Faculty

And we're thinking today, absolutely we're going to ween him and get him sorted. We turned his sedation off.

00:00:56 Faculty

Just thought things happen and he hasn't woken up.

00:00:59 Nurse 1

Is there anything else going? You said he's going for a CT scan.

00:01:02 Faculty

In two hours, just to check if there is anything.

00:01:05 Faculty

It's 10 o clock at night and they decided that they'll do a CT scan, they're slotting him in at about midnight or so.

00:01:11 Faculty

So I'm going to be around if you need anything but if you could just take over his care.

00:01:17 Nurse 1

Yeah. So basically getting him ready for scan?

00:01:19 Faculty

Yeah, it's two hours away.

00:01:21 Nurse 1

Two hours away, OK.

00:01:26 Faculty

So access wise, he has a central line here, he has radial arterial line and he has a peripheral line here.

00:01:37 Faculty

He's been off for quite a few hours and and I just put because the feed's off.

00:01:43 Faculty

I've just put him on a wee bit of maintenance fluids.

00:01:46 Nurse 1

Yeah. OK, fine. Lovely. Thank you.

00:01:55 Nurse 1

Winston is his name?

00:01:56 Faculty

Winston, Murray, 75.

00:02:05 Nurse 1

Does his next of kin know?

00:02:07 Faculty

His next of kin does know.

00:02:16 Nurse 1

Winston, good evening. My name is NURSE 1. I'm one of the intensive care nurses. I'm just gonna have a little look over you and see how you're doing, alright?

00:02:32 Nurse 1

Can you open your eyes for me at all?

00:02:36 Nurse 1

I'm going to help you open your eyes just to check your pupils, alright?

00:02:42 Nurse 1

Do you have a pen torch? I'll look in his eyes...

00:02:44 Faculty

Pen torch is here.

00:02:46 Nurse 1

Wonderful. Thank you.

00:02:51 Nurse 1

Oh wow, that's cool.

00:02:59 Nurse 1

Equal and reactive. Ok fine, thank you very much.

00:03:06 Nurse 1

Winston, can you squeeze my hand for me?

00:03:07 Faculty

He doesn't squeeze.

00:03:10 Nurse 1

Ok, he’s not responding, fine.

00:03:20 Faculty

The sedation is attached but has been turned off.

00:03:50 Nurse 1

OK, so I'm just going to give you a little suction and see how your cough is doing.

00:03:57 Faculty

Small cough not that much at all.

00:04:01 Nurse 1

Anything in his mouth?

00:04:01 Faculty

Not much.

00:04:05 Nurse 1

Winston, I'm just going to have a little listen to your chest, OK?

00:04:48 Nurse 1

Quite quiet.

00:04:50 Faculty

The bases, you don't hear much from him.

00:05:02 Nurse 1

Yeah, does he have a history of anything?

00:05:07 Faculty

Not at all, he's been in sinus all along.

00:05:09 Nurse 1

Are you able to go and grab one of the doctors?

00:05:12 Faculty

Who do you want?

00:05:15 Nurse 1

Whoever was looking after him today, I'm just gonna do an ECG as well.

00:05:36 Doctor

Hello.

00:05:39 Nurse 1

Yeah. So just halfway through an assessment of Winston, I don't know if you know Winston. So he's the chap who came in with urosepsis.

00:05:51 Nurse 1

Reduced GCS. We're going to CT in a bit.

00:05:55 Nurse 1

He's just gone into a fast rhythm, blood pressure is not compromised yet.

00:06:00 Nurse 1

Is it possible to get an ECG?

00:06:03 Nurse 2

Yeah sure.

00:06:09 Nurse 1

This looks like the last gas. Respiratory wise, he looks fine. But this is sustained and probably will start having problems soon.

00:06:16 Nurse 1

Norad is running at 4, how many mikes I don't know.

00:06:23 Nurse 2

Doesn't say, have to work it out.

00:06:28 Doctor

So I assume this is his previous ECG?

00:06:29 Nurse 1

Yeah.

00:06:31 Doctor

And is this a recent gas?

00:06:32 Nurse 1

Is that a recent gas?

00:06:33 Faculty

It was about probably an hour ago, that gas.

00:06:37 Nurse 1

I’ll do another gas.

00:06:38 Doctor

If you wouldn’t mind, thank you, that would be great.

00:06:47 Nurse 2

Yes, I can get some drugs and bits as well if you need.

00:06:56 Faculty

So you're about to do a gas. You were about to talk about getting some drugs.

00:07:02 Doctor

We've ordered an ECG. We're gonna get a history to see if he's had any previous AF in the past.

00:07:08 Faculty

And I can tell you he hasn't had any previous AF.

00:07:10 Doctor

In which case we'll need to look at his bloods and most recent electrolytes.

00:07:16 Nurse 1

I'm doing the gas. Have we got a recent gas?

00:07:19 Faculty

I will go and do your gas for you.

00:07:23 Nurse 1

I'm gonna go up on the norad in the meantime unless you need anything else.

00:07:27 Nurse 1

Fluctuating a little bit.

00:07:29 Doctor

Have we been given a target blood pressure before?

00:07:32 Nurse 1

So he's peeing, on a MAP of 75.

00:07:36 Doctor

Blood pressure for him.

00:07:39 Nurse 2

I was told 70-75

00:07:43 Doctor

75-80 is a max, ok, thank you.

00:07:47 Doctor

In which case then, at the moment don't go up on the norad any more. Just leave it as it is. It can actually drive the AF a little faster.

00:07:54 Doctor

See where we are with the gases?

00:07:56 Nurse 1

I've got the recent Bloods here. If you want me to read them out to you.

00:07:59 Doctor

If you just hold on second, just getting these numbers. Just give me a moment.

00:08:05 Nurse 2

Shall we top up his potassium?

00:08:06 Nurse 1

Yeah, 3.2 isn't it?

00:08:16 Doctor

OK. So, yeah, his potassium is low. Shalll we see the rest?

00:08:25 Doctor

Potassium, yes. So we need to replace his potassium. Do we have central access?

00:08:30 Nurse 1

Yes.

00:08:29 Doctor

He does, are you happy to replace it using the central prescription?

00:08:35 Nurse 2

The potassium? Yeah.

00:08:43 Nurse 2

Is there anything you want me to do in the meantime?

00:08:47 Doctor

Just thinking, we've done an ECG...

00:08:53 Doctor

Let's just see at the moment we should, ideally, since he's not fully compromised, consider replacing his electrolytes first before going down the route of cardioverting him. That would be ideal.

00:09:05 Nurse 2

I'll get some magnesium for you.

00:09:09 Doctor

If you wouldn't mind grabbing some, yeah, magnesium and also some topolol.

00:09:29 Nurse 1

I'm just starting on a really low dose.

00:09:33 Doctor

So for this we should be aiming for 4.5 to 5. Yeah, and do a gas.

00:09:42 Doctor

The magnesium should end up more normal.

00:09:50 Nurse 1

What's the alarm?

00:09:52 Doctor

Extreme tachy(cardic).

00:09:56 Nurse 2

Blood pressure's ok.

00:09:59 Nurse 1

I'm just staying where we are really.

00:10:04 Nurse 2

I didn't finish the potassium.

00:10:22 Doctor

Are you able to access the X-ray system?

00:10:24 Nurse 1

I can't, I don't have a login but if I get it up for you?

00:10:27 Doctor

Would you mind? Just his chest x-ray if that's ok.

00:10:34 Doctor

Just trying to think out-of-the-box what are causes of fast AF.

00:10:38 Nurse 1

Would you be able to just check on the metoprolol as well?

00:10:51 Doctor

The ET tubes are alright, central line Is lower. Can't really see the tip going to the atrium, so that's one. They excluded going on. the RNG which is below the diaphragm and once OK, fine.

00:11:23 Doctor (to patient)

I'm just gonna listen to your chest, Winston.

00:11:27 Nurse 2

Oh, that's come out.

00:11:34 Doctor

Let's increase our adrenaline. Is that OK?

00:11:35 Nurse 1

I'll go up on the norad.

00:11:39 Doctor

Would you mind grabbing the resus trolley?

00:11:49 Nurse 1

Still dropping, I'm gonna go up again (on the norad).

00:11:52 Doctor

I need you to get the sedation ready, just in case we need to shock him.

00:11:56 Nurse 2

So we've got fentanyl on and propafol

00:12:00 Nurse 2

So we've got them both attached.

00:12:04 Doctor

If you wouldn't mind just turning them on and getting them ready, making sure, in case we need to cardiovert.

00:12:16 Nurse 1

Map of 56.

00:12:21 Nurse 1

Did you get the metoprolol on that, or did you...

00:12:24 Nurse 2

Yeah, just turned that on.

00:12:35 Doctor

Would you like to get the pads and just pop them on for me?

00:12:38 Doctor

And also the three lead monitoring.

00:13:09 Doctor

Are there any other doctors working on the unit?

00:13:11 Faculty

They're in ED at the moment.

00:13:13 Nurse 1

Want me to call them?

00:13:14 Doctor

Yeah, it might be, i mean, ideally the consultants.

00:13:35 Nurse 2

So I’ll just call the doctors.

00:13:40 Doctor

Noradrenaline is going up. I think that we need to restart the fentanyl.

00:13:42 Nurse 2 (on phone)

Hi, we’re just in JR, we’re just looking for any ICU doctors who are anaethetists. We’re in resus at the moment.

00:14:03 Doctor

And these are all data in the last 48 hours. Ok so I'm giving a bolus of fentanyl.

00:14:09 Nurse 2 (on phone)

Perfect. No, that's all. Thank you. Thanks. Bye.

00:14:17 Nurse 1

Are you free?

00:14:19 Nurse 1

They're just gonna fast feedback.

00:14:20 Doctor

Could you put the defib pads inside?

00:14:34 Nurse 2 (on phone)

Hello we've got an emergency thing here. We've got our patient in his 70s, came in with urosepsis currently he was on a sedation hold, he's intubated.

00:14:49 Nurse 1

So it's not going up.

00:14:55 Doctor

That's 10 mills an hour, not going up.

00:15:05 Nurse 2 (on phone)

So I don't know what his temperature is at the moment.

00:15:09 Nurse 2 (on phone)

But his heart rate, he's gone into fast AF. We need to cardiovert him but could use a bit more support if you could come help us.

00:15:12 Doctor

So we have AF, a decompensated blood pressure. So I think we need to cardiovert this gentleman.

00:15:17 Doctor

OK, we've sedated him with some propofol and some fentanyl and that's going in at the moment.

00:15:25 Doctor

Are you able to cardiovert him?

00:15:27 Nurse 1

No, I'm not able to do that.

00:15:30 Nurse 2 (on phone)

Ok, are there any other doctors available?

00:15:35 Doctor

That's ok, I can do that.

00:15:36 Nurse 2

Great. OK. Thank you.

00:15:38 Nurse 1 (on phone)

Is there anything else that we can do in the meantime? Great, thank you.

00:15:48 Nurse 2

Norad is still running like that.

00:15:52 Nurse 1

Their backup doctor is going to come and help support.

00:15:54 Doctor

Say that again, sorry.

00:15:57 Nurse 2

With the norad, I'm going to keep going up until you...

00:15:58 Doctor

Yeah, that's alright. What did the doctor say?

00:16:02 Nurse 1

She said that she should be here in 20 minutes, I said can she come sooner. So she's going to phone another doctor if she can't get here.

00:16:08 Nurse 1

Asked her if there's anything else that we can do in the meantime.

00:16:11 Nurse 1

And she said no, cardiovert is the right idea.

00:16:13 Doctor

Can you put the oxygen on 100%?

00:16:18 Doctor

So this is an emergency situation, AF with compromise, we need to cardiovert this gentleman.

00:16:22 Doctor

We've got the defib on.

00:16:24 Doctor

I don't think anyone else was happy to do the defib so I'll do that side of things.

00:16:29 Doctor

All right, so let's just make sure we got this. Yeah, we've got the sync on. We've got it set to 100. I'm just going to check he is not responding.

00:16:37 Doctor

He is not responding, ok.

00:16:39 Doctor

So everybody can stand clear. OK, we've got a contained oxygen circuit there. I'm charging.

00:16:47 Doctor

There we go. OK. Checking top, middle, bottom.

00:16:50 Doctor

Clear and shocking.

00:16:57 Doctor

OK, we've gone back into something that appears to be sinus. Can we just check any pulse just to make sure?

00:17:05 Doctor

Got a pulse, ok, there's an art line too. Alright, gonna put this back down to monitor.

00:17:15 Doctor

OK, so shall we start a reassessment for this gentleman? Oh, he's gone back. Ohh, tha's a shame.

00:17:21 Doctor

OK, fine. So and we are compromised again. So I think we need to go back and recardiovert this gentleman.

00:17:28 Doctor

Is there anything we can do to improve our chances, I think we can probably give something such as amiodarone.

00:17:34 Doctor

Shall we give 300 milligrammes of amiodarone?

00:17:34 Nurse 1

Yeah, yeah. Check that with you.

00:17:37 Doctor

It's going to have to go in pretty quickly.

00:17:40 Nurse 1

Fine, we’ve got 5% glucose and...

00:17:42 Doctor

In the meantime, I'm going to have to cardiovert him again.

00:17:49 Doctor

This time, actually, if I can get this working.

00:17:54 Doctor

OK, fine. OK. So I'm just going to cheque that he's still no responding, no response.

00:18:02 Doctor

OK, so I'm gonna cardiovert this man if nobody touches him. OK, everybody clear. Oxygen is a contained circuit. Charging. Checking the top. Checking the sides.

00:18:13 Doctor

Checking the bottom and shocking.

00:18:26 Doctor

OK, fine. So not responding to that anymore. So yeah, I think chemical cardioversion here is an important thing for us to do.

00:18:33 Doctor

Can you go up on the noradrenaline to see if we can actually achieve a better map for him?

00:18:39 Doctor

We're still aiming for that map target of 75 but anything above 60 at the moment, I would be happy.

00:18:46 Doctor

The amiodarone is getting ready.

00:18:47 Nurse 1

Yep.

00:18:49 Nurse 1

Would you mind just telling the label?

00:18:50 Nurse 2

Checked with me, so preparing it.

00:18:54 Doctor

I'm going to call the cardiologist.

00:18:59 Doctor

Can you spin the monitor? Let me know if any changes from your side.

00:19:04 Nurse 2

Dunno if we've got enough (unintelligible) in this bag.

00:19:15 Doctor (on phone)

Would you be the fast beep the cardiology registrar to adult ICU please?

00:19:24 Doctor (on phone)

Thank you very much. That should be alright at the moment. As long as they can turn up, that's fine.

00:19:29 Nurse 2

I may also inform the coordinator.

00:19:33 Nurse 1

And just to help prepare medications.

00:19:44 Nurse 1

Where are we at the moment?

00:19:46 Nurse 1

The BP is dropping again still, do you want me to go up on the noradrenaline?

00:19:52 Faculty

Hard to find access here.

00:19:56 Faculty

We've got potassium, noradrenaline going down here, fentanyl going here, magnesium going, calcium going so don't have any more.

00:20:03 Nurse 1

What about his heartmans? Can we stop his heartmans?

00:20:05 Faculty

That's peripherally though.

00:20:10 Faculty

So maybe the potassium.

00:20:16 Doctor

We're getting close to a resuscitation scenario. Get a large cannula. I'm happy for it to go through.

00:20:34 Nurse 1

Shall we get another or?

00:20:37 Doctor

Yes, sure. Take the gas.

00:20:46 Doctor

We are still in fast AF. We're still compromised. That's going in stat. 300 right?

00:20:55 Doctor

Yeah, it's a resus scenario.

00:21:03 Doctor

I’ve taken another gas.

00:21:07 Nurse 1

The cardiology registrar said convert 3 times. That doesn't work, we continue with amiodarone. That doesn't work, we can send some help.

00:21:25 Doctor

Ok great, we're gonna try 150 now as a cardioversion, so we've still got sync on. We're gonna cardiovert him one more time, so let's just check his GCS, make sure he's still sedated.

00:21:35 Doctor

I presume that was no response. Ok, onto 150 this time, so we're charging everybody. Stand clear oxygen is a contained circuit to the top, sides, bottom, me and shocking.

00:21:52 Doctor

No, no, no. He's in asystoly at the moment.

00:21:57 Doctor

Just wait for a moment. Yeah, we're close to starting CPR.

00:22:02 Doctor

Yeah, start chest compression.

00:22:15 Doctor

Start CPR, chest compressions. Could I ask you put a 2222 call please and ask for an adult cardiac arrest on adult ICU.

00:22:27 Doctor

Would you mind grabbing an adrenaline one in 10,000 please?

00:22:33 Doctor

Giving that one Into the central line.

00:23:12 Faculty

I'm got the adrenaline here, want me to give the adrenaline?

00:23:13 Doctor

Yes, please. To give the adrenaline.

00:23:16 Nurse 1

OK, looks like we've got a little bit of the blood pressure.

00:23:18 Doctor

OK, just hold hold on one second. No...keep going.

00:23:30 Doctor

Ok, if you just hold compressions, definitely.

00:23:32 Doctor

Signs of life. See any CO2?

00:23:34 Doctor

Yeah, OK.

00:23:42 Doctor

Right we have a hart rate, a blood pressure.

00:23:48 Doctor

Shall we do a quick assessment of this?

00:23:52 Doctor

Could you do a 12 lead ECG?

00:23:54 Nurse 1

I can do.

00:24:01 Faculty

Do you want me to do another ECG?

00:24:03 Nurse 1

Yeah.