00:00:01 Faculty

You're going to be taking over his care, ok?

00:00:05 Faculty

Ok so, Winston is a 75 year old gentleman.

00:00:08 Faculty

He's day three in AICU at the moment and the reason why he came in is we're thinking a bit of urosepsis.

00:00:14 Faculty

So his history is that he came into ED about two days ago with the GCS, his wife found him collapsed at home.

00:00:23 Nurse 1

Sorry, he came in two days ago?

00:00:26 Faculty

This is his third day.

00:00:31 Faculty

So this is day 3 in IC.

00:00:33 Nurse 1

In ICU.

00:00:42 Faculty

And his wife found him and he had been on antibiotics.

00:00:47 Nurse 1

Do you know what kind?

00:00:50 Faculty

Yeah, (unintelligible medication), he was on.

00:00:54 Faculty

And he was brought into ED.

00:00:55 Faculty

Mainly because of his GCS.

00:00:57 Faculty

He was found to be hypertensive and tachycardic.

00:00:59 Faculty

He was a bit pyrexia and drowsy.

00:01:01 Faculty

So he was intubated at that point, mainly because of his low GCS and also he needed quite a lot of aggressive IV fluid resuscitation.

00:01:10 Faculty

He also at that time, because of his low GCS, had a CT scan and that was found to be normal.

00:01:15 Faculty

And they were happy enough with that.

00:01:18 Faculty

So the working diagnosis of him is urosepsis.

00:01:21 Faculty

So he's been in ICU now for a few days, been giving him some IV and antibiotics and also treating him just as sepsis.

00:01:32 Faculty

He's on noradrenaline and it's on 4 mills per hour and that's single strength and that's been, you know, sort of keeping map around 70 to 75 which is what we're aiming for.

00:01:43 Faculty

He's managed to pee about 50 mills an hour on that.

00:01:46 Faculty

He has been on propofol and fentanyl to keep him asleep, but just because his ventilator settings are getting reduced, we've decided to reduce his sedation just to see, you know, if he does wake up and to see if we can extubate him.

00:02:00 Faculty

However, so he's on a station hold and that's been hold now for about 14 hours.

00:02:03 Faculty

And he hasn't woken up. So we're a bit worried about that.

00:02:06 Faculty

So he is down to go for a CT scan in about two or three hours time.

00:02:14 Faculty

And that really is because of the low GCS, because he hasn't opened up after his sedation.

00:02:21 Faculty

So as I said, respiratory wise he is on a vent.

00:02:24 Faculty

He has got a size 7, 22 and he is on bi level.

00:02:30 Faculty

Very minimal settings really, so 16 over 5, he's on 30% and he's been on 30% for about 3 days now.

00:02:43 Faculty

He's not breathing much by himself.

00:02:46 Nurse 1

How old did you say he was?

00:02:48 Faculty

He’s 75.

00:02:51 Faculty

So he's got main IV fluids going at 80 mills an hour, and he's got to his NORAD going.

00:02:55 Faculty

I've kept the sedation attached just in case he wakes up at the start, you need to give him a bolus.

00:03:00 Faculty

Any questions you have for me?

00:03:06 Nurse 1

Yes, has he had his bowels open recently?

00:03:08 Faculty

Yesterday.

00:03:10 Nurse 1

Yesterday, what time, do you know?

00:03:12 Faculty

Um, no.

00:03:13 Nurse 1

Um, some of his lines, invasive monitoring, what has he got?

00:03:17 Faculty

So the lines, he's got a central line here.

00:03:19 Faculty

That's where he's got a central line here, and that's internal jugular. That's all fine. All in date. Peripheral arterial line, in date. Peripheral line here in date and patent and running the main IV fluids.

00:03:32 Nurse 1

And what infusions have you got?

00:03:35 Faculty

(unintelliglbe) and NORAD running through the port. Yeah, running through the quadruple lumen is the NORAD.

00:03:46 Faculty

And we have the sedation here just because we were thinking of intubating him and we stopped the feed and that's been stopped for about 10 hours now and we just decided to put it onto free drain.

00:03:58 Nurse 1

OK. And how much is that at the nostril?

00:04:00 Faculty

That's 65.

00:04:06 Nurse 1

And does he have any wounds, dressings?

00:04:08 Faculty

No.

00:04:10 Faculty

All right. Happy?

00:04:17 Faculty

I just gotta stay around, but I'm just getting the bedspace sorted out.

00:04:21 Nurse 1

Out. So am I imagining this is 7 o clock?

00:04:22 Faculty

You are.

00:04:24 Faculty

Yeah, it can be any time you want it to be.

00:04:30 Faculty

You won't be able to chart sadly there because it's in September, but we're trying to work that out. But you can look at blood gas, the last...

00:04:40 Nurse 1

Oh sorry I was gonna ask to go through labs and drugs please.

00:04:45 Faculty

So the only thing I have for you are labs here and then if you look at the flowsheet, this was the last...I think I had a blood gas here.

00:04:59 Faculty

So that's the last blood gas that I had, just haven't been monitoring.

00:05:07 Nurse 1

So with his potassium, has that been replaced?

00:05:11 Faculty

That was, I think, we replaced it once.

00:05:16 Faculty

Yeah, I think we did. About 20 mills, we gave a few hours ago.

00:05:23 Nurse 1

OK, so it's not 7:00 o'clock now it's so this is a new one.

00:05:29 Nurse 1

And that's been replaced.

00:05:31 Faculty

So that was a few hours ago.

00:05:39 Faculty

That's all the handover I can give you for this scenario.

00:05:48 Nurse 1

OK, I would get NURSE 2 at this point.

00:06:13 Nurse 1

He's just gone extremely tachy (cardic).

00:06:15 Nurse 1

About 90 beforehand. So we’ll have to get an ECG because I don’t have any obs.

00:06:21 Nurse 2

OK, can we get an ECG?

00:06:24 Faculty

Yes, I did an ECG earlier...

00:06:27 Nurse 2

His blood pressure...is his blood pressure ok?

00:06:30 Nurse 1

Oh, it won't let me chart.

00:06:33 Faculty

That's fine. Don't worry about charting. That's fine.

00:06:36 Nurse 2

Was ECG in sinus rhythm before?

00:06:38 Faculty

Yes, it was in sinus rhythm.

00:06:40 Nurse 1

Ok, can we do another one?

00:06:42 Faculty

Yes, we can do another one.

00:06:46 Nurse 2

Are you happy? Blood pressure's fine.

00:06:54 Faculty

Just got a 12 lead here for you. The one thing I didn't show you was how to turn the alarms on and off here.

00:07:08 Doctor

Hi.

00:07:10 Nurse 1

Hello. I've just been handed over.

00:07:13 Doctor

Ok.

00:07:15 Nurse 1

With urosepsis, and no longer normal sinus rhythm, was 90 BPM and has now shot up to 150.

00:07:24 Doctor

OK, great. So what's this chap's name?

00:07:26 Nurse 1

It's Winston.

00:07:27 Doctor

OK. I don't know him because I've been away, but I had a look over. How long has he been in the unit?

00:07:34 Nurse 1

For three days. 75 years old.

00:07:37 Doctor

OK, fine. Has he been stable over the course of the day?

00:07:40 Nurse 1

As far as I am aware.

00:07:41 Doctor

OK. Do you know this chap?

00:07:43 Nurse 1

I don't know him, sorry.

00:07:45 Doctor

So, anything else, anything else changed? Has he had a fever recently or any anything else?

00:07:50 Doctor

No. OK, any change in venting...in oxygen requirements. Ok recently been steady, OK, it looks like he's gone into AF. And you said you've just done this 12 lead?

00:07:59 Nurse 1

Yes, just now.

00:08:01 Doctor

And do we do we know anything else about him in his past medical history? Got his notes anywhere?

00:08:08 Faculty

No but working diagnosis of urosepsis.

00:08:11 Doctor

So urosepsis, anything else in the past, any cardiac history?

00:08:14 Nurse 1

He came to ED, he was on antibiotics but he was found collapsed. Intubation needed in ED.

00:08:24 Doctor

OK, high (unintelligible) and high GCS, ok.

00:08:29 Nurse 1

And he has a CT Scan, post sedation 14 hours but he hasn't really woken up.

00:08:35 Nurse 1

The CT scan's booked for two hours.

00:08:37 Doctor

A CT brain is that, because he's not waking up?

00:08:40 Nurse 1

Yep.

00:08:41 Doctor

Alright, fine. So you got him on a bit of a norad.

00:08:44 Nurse 1

Yeah, I've just come up slightly cause it was dropping, just around 70, 70 to 75.

00:08:50 Doctor

So it looks like he's gone into AF then. And I just might have a little listen to his chest and things, if that's alright.

00:08:57 Doctor

I'll wash my hands and put my apron on.

00:08:58 Nurse 2

Temperature is 37.6.

00:09:01 Doctor

Ok, and he's on antibiotics already is he?

00:09:03 Doctor

What's he on? Do you know?

00:09:08 Doctor (to patient)

Just going to have a listen to your heart and lungs, I'm DOCTOR, one of the doctors.

00:09:14 Nurse 1

It says overdue, does that technically mean it's been given?

00:09:18 Faculty

Yeah, it has been given.

00:09:23 Faculty

We do have aprons and gloves if you want it.

00:09:36 Doctor

OK. And just having a feel...how does he feel around the edges?

00:09:41 Doctor

Is he warm and sweaty?

00:09:43 Faculty

Yeah, a bit warm. And sweaty.

00:09:52 Doctor

He's on 30%. Hasn't gone up recently? Hasn't changed at all?

00:09:53 Nurse 1

Yeah, it has been, no changes for a couple of days.

00:09:57 Doctor

And off sedation for 14 hours?

00:09:59 Nurse 1

14 hours.

00:09:59 Doctor

Is he doing anything at all?

00:10:01 Nurse 2

Not really.

00:10:06 Doctor

So you've got a rhythm change to...

00:10:09 Doctor

That's an old one, is it?

00:10:10 Faculty

Yeah, probably about three hours ago.

00:10:15 Doctor

Could we do a new one? So I mean, at the moment just to say what's going on in my head, we've got a rhythm change to AF which is not that uncommon in the setting of someone who is admitted with urosepsis. Just remind me, how old this chap is?

00:10:27 Nurse 2

73.

00:10:28 Doctor

73, OK.

00:10:29 Doctor

Alright, so at the moment he doesn't look like he's compromised by it, but his blood pressure is starting to fall now, isn't it?

00:10:36 Doctor

Should we just go up on the norad bit? Where are we fluid resuscitation wise. Is he positive since he came in?

00:10:44 Doctor

Can I operate careview?

00:10:46 Faculty

There's nothing there.

00:10:48 Doctor

Ok. But he's been on the unit for how long?

00:10:50 Faculty

He's been in the unit for three days.

00:10:52 Faculty

CBP of about 6, we have just been treating him with fluids, stuff like that and he’s been fine.

00:10:59 Doctor

Alright, so he's not massively positive.

00:11:00 Doctor

OK. Could we give him, while we're working out what the right thing to do is, we'll...ok, his blood pressure is still falling despite going up on the norad.

00:11:06 Nurse 2

Yeah, going up on norad.

00:11:11 Doctor

Can we deliver a 250 ml fluid bolus please?

00:11:15 Nurse 1

I can get that.

00:11:17 Doctor

And we'll have to think about, if he becomes unstable, we're going to need to cardiovert him, aren't we? If he becomes hypotensive despite that.

00:11:23 Faculty

This is for the blood gas.

00:11:24 Doctor

Thank you very much.

00:11:26 Doctor

Can we pop him up to...can we pup him up to...his fiO2 up a little bit?

00:11:30 Nurse 1

Yep, sure.

00:11:32 Doctor

Just pop him up to 100, just for a minute.

00:11:34 Nurse 1

OK, that's done.

00:11:36 Doctor

Would you be happy to connect him, get the defib and connect him up in case we do need to cardiovert him?

00:11:43 Nurse 1

Yeah, his potassium...

00:11:41 Doctor

Alright, so potassium is three. So it is a bit hypokalemic. Has he had any potassium given today?

00:11:49 Faculty

Had a bit earlier.

00:11:51 Doctor

So we've got a pH 7.3, pcO2 4.7, pO2 13.1, haemoglobin 95, was 90 on the previous blood gas so it doesn't look like bleeding is responsible. He is a bit hypokalemic. Lactate is only 1.6, glucose is fine, not too bad...

00:12:11 Nurse 2

Just keep coming up on norad.

00:12:16 Doctor

Ok, is he responding at all to us?

00:12:19 Faculty

norad is 7. No, he's not responding.

00:12:20 Nurse 2

Not responding.

00:12:21 Doctor

OK. I mean, it's clearly...what was this map doing before we checked, before rhythm change?

00:12:25 Nurse 1

It was 70 to 75, which we're aiming for.

00:12:29 Doctor

It's gone up. OK. I think we should think... we should consider about cardioverting him because we need to go up on our requirements as he is clearly not tolerating this well, we will need to think about what we do to keep him, to keep him in sinus rhythm afterwards though. Have you got any...we need to correct the potassium...you haven't got any ready, have you? We'll just need to think about correcting his potassium afterwards.

00:12:56 Nurse 2

Do you want me to get a spare mask?

00:13:01 Doctor

We normally do 20 mmol, can you get some concentrate potassium, on the central arterial please?

00:13:07 Doctor

Do you know what his magnesium was earlier in the day?

00:13:15 Nurse 1

0.75

00:13:16 Doctor

We've got scope to replace that afterwards, but I wouldn't do it acutely.

00:13:21 Doctor

So we've got an increasing norad requirement, chap's well filled. He’s not tolerating the rhythm well.

00:13:29 Doctor

The only thing is he's been off station, hasn't he? Although he's not responding, we do is consider the possibility he's gonna be aware and uncomfortable for him.

00:13:37 Doctor

So have we got a little bit of....

00:13:38 Nurse 2

He's still attached...

00:13:39 Doctor

He's still attached.

00:13:42 Doctor

Could we give him...could we turn the fentanyl on? Could we just give him a bolus of 100 of fentanyl?

00:13:51 Nurse 2

How many mills would that be?

00:13:53 Doctor

So, is it 50 milligrammes per ML that fentanyl, is that our conventional strength, you've got that there?

00:13:56 Nurse 2

Yeah

00:13:55 Faculty

50 megs per mill, yeah.

00:14:01 Doctor

If you were to give him a mill of fentanyl please.

00:14:05 Doctor

Are you happy when using the defib or do you want me to do it?

00:14:09 Nurse 1

I have had my...

00:14:11 Doctor

You've had your training?

00:14:18 Doctor

Yeah, we need to give a synchronised shock.

00:14:21 Nurse 1

You might have to do that. Sorry.

00:14:22 Doctor

That's alright.

00:14:33 Faculty

Can I just check this with you?

00:14:34 Nurse 2

Yes, you may.

00:14:39 Doctor

We should also give them a little smidge of propofol as well.

00:14:41 Doctor

Just before we do this.

00:14:43 Nurse 2

How much?

00:14:44 Doctor

I would...I mean he's not woken up in 14 hours off have has he? So I would once we've got everything ready, I haven't started yet because his blood pressure but we'll just give him...I would aim to give him a mill of 10 milligrams.

00:14:59 Doctor

Just to make sure he's not aware of what we do.

00:15:06 Doctor

Fine. So just to check what everyone's doing, what the plan is that we get DC cardiovert him cause he's got hemodynamically unstable AF.

00:15:15 Doctor

Once we've done that, we will correct his electrolytes because that's one thing that might tend to maintain sinus rhythm.

00:15:21 Doctor

If he goes back into AF we might need to think about giving him some (unintelligible).

00:15:25 Doctor

Right. So let me see. So we need to turn on synchronisation for this.

00:15:31 Nurse 2

Yep.

00:15:35 Doctor

And it tells us how much to use, so it's telling us that the BTS VTA from major plus the first shock should be 150 joules.

00:15:44 Nurse 2

Yep.

00:15:45 Doctor

So I won't disconnect him from the ventilator because we got a closed circuit. Are you guys happy?

00:15:48 Nurse 2 and 1

Yep.

00:15:51 Doctor

So we've given him 100 of fentanyl, is that right?

00:15:54 Nurse 1

For 1 mil, yeah.

00:15:55 Doctor

Ok, am I allowed to give a little dose of propofol?

00:15:59 Nurse 2

Yep.

00:16:02 Nurse 1

Map of 53.

00:16:03 Doctor

Just give him a little bit, hopefully get him back into sinus.

00:16:21 Doctor

OK, so just getting a mill of propofol there.

00:16:28 Doctor

Right. So I'm going to charge up to 150, OK.

00:16:40 Doctor

Stand back, everyone away.

00:16:43 Doctor

And I'm going to deliver the shock now.

00:16:49 Doctor

And let's just see what's happened.

00:16:55 Doctor

We've got a rhythm change there back to sinus tachy, let's see what happens with this pressure.

00:17:05 Doctor

So there's pressures coming up.

00:17:10 Doctor

Fine. OK. But we've gone back to...

00:17:12 Nurse 2

That's just propofol at the moment.

00:17:18 Doctor

He's reverted back to AF.

00:17:20 Doctor

There probably isn't much point in repeatedly shocking him at this stage.

00:17:24 Doctor

Can we get some (unintelligible), If we give our 300 milligrammes loading dose.

00:17:30 Doctor

Give it over half an hour.

00:17:32 Doctor

Is that OK to get the 300 in.

00:17:41 Doctor

All right. So we're going to correct the potassium. We've got hypokalaemia, and we're gonna give a loading dose of amiodarone.

00:17:50 Doctor

We've got the magnesium to correct as well, the potassium is probably the more important thing.

00:17:55 Nurse 2

Yep, I can do that.

00:18:00 Doctor

Let's drop the FIO two down, because we're not gonna shock him again. Take him back down to 50%.

00:18:07 Doctor

In the mean time, we're going to have to go up on the NORAD. What target on that are we working to?

00:18:12 Nurse 1

70-75

00:18:13 Doctor

Was he known to be hypotensive then?

00:18:16 Nurse 1

Yes.

00:18:19 Doctor

Just have a think about whether anything else could have made him unstable?

00:18:23 Doctor

We know he's uroseptic. He's day 3, isn't he?

00:18:27 Doctor

Any new drugs we've started?

00:18:29 Doctor

Anything that we've changed today that you know of?

00:18:31 Nurse 1

Not that I know of.

00:18:33 Nurse 2

So did you want the propofol running?

00:18:35 Doctor

No, I put it on hold. I just wanted...I just gave him a little smidge and, just to make sure he was amnesic for the shock and I know he hadn't woken up, but we gave him a little bit of fentanyl and propofol, both of which can stop at the moment.

00:18:52 Doctor

So can we go up a bit more on the norad just to try and keep the map up?

00:19:02 Doctor

So we've still got fluid running in, so we're correcting the hypokalemia that we've got. We're going to correct his electrolytes and he's had a bit of a fever, hasn't he? With us, we just think about when he's got uncontrolled sepsis to have this happen.

00:19:15 Doctor

Can I look at what antibiotics is on the computer?

00:19:18 Nurse 1

Yeah.

00:19:20 Nurse 1

Can you prescribe the amiodarone?

00:19:22 Doctor

Yeah, do I just prescribe it now. I need to prescribe...uncontrolled sepsis, isn't he?

00:19:27 Nurse 1

It's not linking up.

00:19:50 Doctor

He's very unstable. We'll have to have another go at DC cardioverting.

00:19:52 Doctor

So we'll do exactly the same as we did before. He's still complete unresponsive.

00:20:20 Speaker

I might just give him another little bit of fentanyl.

00:20:34 Nurse 2

Do you want us to start preparing anything?

00:20:39 Doctor

OK. So we're going to try dc cardioverting again while you're getting the other drugs ready. So if we all step away.

00:20:45 Doctor

We're gonna keep the oxygen going. So we've got hemodynamically unstable AF going to DC cardio again.

00:20:51 Doctor

Charging now.

00:20:55 Doctor

Everyone away please. OK, shocking now.

00:21:04 Doctor

OK, so he's not responded to that.

00:21:09 Doctor

Alright, so we've got our fluid bonus going. in this situation?

00:21:14 Nurse 1

Spare pump?

00:21:15 Doctor

Yeah, I think.

00:21:18 Nurse 2

I need to push the one lile that.

00:21:22 Doctor

So we got potassium going. We're gonna load the amiodarone.

00:21:32 Doctor

I have to go up on this norad, aren't I?

00:21:35 Nurse 2

Do you wanna start about anything else or wait?

00:21:37 Doctor

Yeah. Well, I'd like to correct the the magnesium as well.

00:21:40 Nurse 2

OK.

00:21:42 Doctor

I also think, I mean, he's had a fever, hasn't he. He's been in hospital for three days. It's possible that this is him becoming septic again.

00:21:47 Doctor

We need to think about what we do about that in terms of getting some more antibiotics, but the moment, the rhythm's the main problem isn't it?

00:21:54 Doctor

I'm gonna have another listen to his chest.

00:21:55 Nurse 1

What rate do you want me to start amiodarone?

00:22:02 Nurse 2

For half an hour.

00:22:02 Doctor

Yeah, we normally give it over half an hour now, but in this in this situation now he's actually become quite unstable and have desaturating.

00:22:10 Doctor

So if you want to just give that effect, if you wanted to set that up to run over 5 minutes, basically as quick as the infusion pump would go and then we'll have another DC cardioversion.

00:22:20 Nurse 1

What would that be, 5 minutes?

00:22:22 Nurse 1

Do you want to give him magnesium and I'll do...

00:22:49 Nurse 2

Is there anything else you want me to do?

00:22:54 Nurse 1

Prepare the maintenance dose of amiodarone after this.

00:23:20 Doctor

Has he had a recent chest x-ray?

00:23:32 Doctor

Is he bleeding from anywhere or anything like that?

00:23:36 Faculty

Nope.

00:23:53 Faculty

That's the last chest x-ray I have.

00:24:01 Doctor

His lung fields are relatively clear in terms of level of coverage. And the LIJC appropriately positioned.

00:24:15 Doctor

That's pretty reasonable, but I suspect now a combination of sepsis and uncontrolled AF are contributing to being quite hypoxic.

00:24:22 Doctor

But he's got equal breath sounds...

00:24:23 Nurse 1

Have we got any more...

00:24:26 Doctor

I'm just gonna turn your norad up a little bit higher while we get other things going.

00:24:29 Nurse 1

Thank you.

00:24:32 Doctor

This is single strength, isn't it?

00:24:34 Nurse 2

Single strength norad.

00:24:41 Doctor

So we still got our fluid running. We got lung capacity and the amiodarone is going quickly.

00:24:45 Nurse 1

Over 5 minutes.

00:24:57 Nurse 1

20 minutes OK?

00:25:01 Doctor

I feel like disconnecting and pushing in by hand in a minute!

00:25:07 Doctor

Alright. Is there anyone who can give us a hand here, he's just getting worse.

00:25:16 Doctor

Is the other reg around or is the SU consultant in the building?

00:25:21 Faculty

They are in ED.

00:25:25 Doctor

I mean, if they're both there, it'd be nice if we could ring the consultant in ED.

00:25:30 Faculty

They’re both trauma call.

00:25:31 Doctor

One trauma call. Yeah. Can we give a ring, who's the consultant?

00:25:35 Faculty

Five patients.

00:25:37 Doctor

So not gonna do it.

00:25:40 Doctor

Can we disconnect the amiodarone and push it in by hand as a bolus? Is that ok?

00:25:50 Nurse 1

Um...can we not...

00:25:52 Doctor

Well it’s because we’re in a situation where we’ve tried shcoking him twice and he’s got hemodynamically unstable AF.

00:25:56 Doctor

Can I give it as a bolus of 300, am I allowed to do that?

00:25:58 Nurse 1

Yes, if you're happy to.

00:26:00 Doctor

Well, I think I have to because we're sort of in a situation where it's required, is the amiodarone down here?

00:26:07 Nurse 1

Yeah, they are there you go.

00:26:09 Doctor

This bottom one, yeah?

00:26:10 Nurse 2

Have I got a spare pump here?

00:26:13 Doctor

Yeah, you can have this one now.

00:26:20 Doctor

OK, so this is 300 amiodarone.

00:26:26 Doctor

Is that 250 mills of fluid, is that finished or...

00:26:30 Nurse 1

Yeah, it’s finished.

00:26:34 Doctor

Chest getting wet, isn't it?

00:26:36 Doctor

It sounds to me like more hypoxic.

00:26:38 Nurse 1

Shall I turn this off?

00:26:38 Doctor

Yeah, if you've had the 250 let's just stop, please.

00:26:44 Nurse 2

Do you want another blood gas?

00:26:46 Doctor

Well, I think I'll have one more go at cardioverting when I've got the amiodarone in

00:26:52 Doctor

The potassium is already running.

00:26:58 Faculty

Do you want me to phone the consultant in ED?

00:27:00 Doctor

Well, if he's, if you think, 5 trauma calls sounds a bit extreme, but if he's available just to have a chart over the phone that would be great.

00:27:07 Doctor

Just to see f he or she has got any other suggestions about patient.

00:27:09 Faculty

Hi put me through to the resus in ED please.

00:27:20 Doctor

OK, that's the amiodarone on 300 gone in.

00:27:37 Faculty

DOCTOR, if you're quick, they're just waiting for the case to come, you can talk to them.

00:27:45 Doctor

Popping norad up even further.

00:27:57 Doctor (on phone)

Hi I'm just struggling with this chap, gone into hemodynamically unstable AF. He's uro sepsis. He's been in for three days and been relatively stable, but now he's just not tolerating his rhythm. I tried to cardiovert him twice but that hasn't worked. I've given him a fluid bolus, 300 amiodarone, we're correct potassium, his norad requirement is just climbing, now his oxygen requirement has just gone up as well. He's not tolerating this terribly well. Now the amiodarone has gone in, I'm gonna have one more go at DC cardioverting him but I don't know if someone can have a look and see if I'm missing anything.

00:28:16 Nurse 2

We’ll refresh potassium on there. Switch potassium and amiodarone.

00:28:39 Doctor (on phone)

OK, that's great. You got any specific suggestions for other things you might want me to do in the meantime?

00:28:44 Doctor (on phone)

He's hypokalemic, his potassium is 3 on the gas and his magnesium was about .7 so there's scope to to replace both of those.

00:28:55 Doctor (on phone)

Yeah, yeah, haemoglobin above 90 and it hasn't significantly fallen since the previous gas. So i don't, I don't think he's bleeding, no signs of bleeding.

00:29:07 Doctor (on phone)

OK, alright, I'll try make the numbers normal and then try getting him back to sinus rhythm.

00:29:10 Doctor (on phone)

OK. Alright. Thanks. Bye.

00:29:15 Doctor

Now we got the amiodarone, we'll have one more attempt at shocking him.

00:29:20 Doctor

Sorry, there's so many things I'm asking for. Thanks for keeping pace.

00:29:27 Doctor

Alright, so it's already 100%.

00:29:31 Doctor

I'm just going to give him a little bit more.

00:29:43 Doctor

Another 50 of fentanyl, not giving any more propofol because he's too unstable.

00:29:55 Doctor

OK. So are you in a position to step away?

00:29:59 Nurse 2

Yeah, yeah.

00:30:04 Doctor

Another 150 joules synchronised shock. So I'm charging now.

00:30:09 Doctor

OK, so shocking.

00:30:17 Doctor

Oh, that looks like a flat line, right? OK.

00:30:20 Doctor

Can we start CPR please?

00:30:21 Doctor

Let's put the head of the bed down.

00:30:25 Doctor

You happy to?

00:30:26 Nurse 2

Yeah. can you get me the step NURSE ONE?

00:30:37 Doctor

Get some adrenaline.

00:30:45 Doctor

Time 2 minutes please.

00:30:54 Doctor

And that's our best point of action.

00:31:11 Doctor

Now remind me, do these threads continue to ventilate people while doing CPR or do I need to bag him from top?

00:31:17 Nurse 2

Um...just a little.

00:31:17 Doctor

OK.

00:31:40 Doctor

OK. So let's just think about things we missed here.

00:31:42 Doctor

We were treating his haemodynamically unstable AF. We knew he had hypokalemia.

00:31:46 Doctor

The glucose on the gas was OK.

00:31:48 Doctor

He was not hypoxic. We were trying to treat the hypokalemia. There were no clinical signs of tension pneumothorax or campenade.

00:31:56 Doctor

Toxic, we've looked at all his numbers.

00:32:00 Doctor

Thrombotic, could have had a PE, there's no change in oxygen requirement immediately before it happened, was there?

00:32:09 Doctor

Do we have an echo machine available so I can have a look at what his heart's doing?

00:32:17 Doctor

No.

00:32:22 Doctor

Are you going to be good to do a second round? I’ll swap?

00:32:25 Nurse 1

Yes please.

00:32:32 Nurse 2

One minute, 45.

00:32:35 Doctor

Only thing running is norad at the moment.

00:32:47 Nurse 2

Two minutes.

00:32:49 Doctor

OK, let's just reassess. So we've got no arterial line trace. There's no central pulse. That's asys.

00:32:58 Doctor

We resume CPR.

00:33:29 Doctor

Can we check what we're giving and make sure we're not giving anything?

00:33:31 Doctor

He's not on insulin infusion?

00:33:35 Doctor

Can we do another gas?

00:33:36 Nurse 2

I'll do gas

00:33:42 Nurse 1

Can we press the buzzer to get more help?

00:33:44 Doctor

OK.

00:33:46 Nurse 1

I didn't actually know I could push that.

00:33:49 Doctor

No, no, that's fair. I'll push the emergency button if we could get some more help.

00:33:57 Nurse 1

One minute.

00:34:10 Nurse 2

I’ll run a blood gas. Do you want to swap?

00:34:33 Doctor

Got CO2.

00:34:35 Doctor

We're still ventilating him.

00:34:36 Doctor

I'm going to have another listen.

00:34:37 Doctor

When you come to stop.

00:34:41 Nurse 1

One minute 45 now.

00:34:44 Doctor

OK, keep going, hopefully there's going to be an underlying rhythm.

00:34:54 Nurse 1

2 minutes now.

00:34:56 Doctor

OK, let's reassess.

00:34:58 Doctor

So we have got arterial line trace, we've got enzyme CO2, we've got a rhythm, good strong pulse.

00:35:04 Nurse 2

Weak but it's there.