00:00:06 Faculty

NOR Adrenaline I have here.

00:00:07 Faculty

I have your second syringe.

00:00:09 Faculty

I have the fentanyl and propofol there, just in case he wakes up and you need some to roll up the pressure. 80 mils of (partment?) solution going and on the vent, he’s on 16 over 5. He’s on 30% so doing really quite well.

00:00:25 Faculty

Good tidal volumes of 550 with that and as I said, he’s only on 30%. When I'm suctioning him and I don't...I'm not even preoxygenation prefer suctioning not.

00:00:39 Nurse 2

Neuroactomy?

00:00:40 Faculty

Neuroactomy fine. Yeah, obviously, blood pressure he’s got quite a good mean of 72 and with that he is producing maybe 40-50 mils an hour.

00:00:53 Faculty

So I'm going to look after my patients, is there anything more that you want to know about this patient?

00:00:57 Faculty

You do have you do have help, I think, like, you know, I'm going to take my patient.

00:01:03 Faculty

But he has been stable.

00:01:10 Faculty

I'm going to be here but I’m not really!

00:01:26 Faculty

If you need any history or anything, I can give it to you.

00:02:14 Nurse 2

Do you want me to actually chart it because it's making me go to the current day?

00:02:38 Faculty

He has been sinus, yeah.

00:02:52 Nurse 2

Has he been generally tachycardic?

00:02:57 Faculty

It's sort of all right. He's been about 90. I mean, since I've been in he's been fine.

00:03:04 Speaker 2

Kind of like...looks like he’s going into...he’s going into a bit of AF. Call the doctor?

00:03:17 Faculty

Do you want me to call the doctor?

00:03:17 Speaker 2

Yeah, if she's around, that would be great.

00:03:27 Nurse 2 (aloud)

Blood pressure's holding...

00:03:38 Doctor

Hi Tom, I'm the doctor on call tonight.

00:03:42 Nurse 2

Do you know much about this patient? Seems to be going into a bit of AF...sporadically.

00:03:54 Doctor

Just tell me a little bit about him.

00:03:58 Nurse 2

Admitted. Found no response in the bathroom.

00:04:01 Nurse 2

Low GTS, his wife brought him in, mainly low GTS, sort of preneurosepsis, pyrexia, hypotensive, tachycardic. He was intubated in ED due to the GTS.

00:04:17 Nurse 2

He's been here 14 hours now, stations been off.

00:04:22 Nurse 2

He's been a bit more stable in that time, not really any problems with blood pressure or ventilating, but he hasn't woken up post 14 hours sedation at all.

00:04:33 Doctor

Used up sedation 14 hours ago?

00:04:34 Nurse 2

14 hours ago.

00:04:35 Nurse 2

Not waking up.

00:04:37 Doctor

OK, So what is he on, so he's intubated...

00:04:41 Nurse 2

On NORAD at the moment.

00:04:44 Nurse 2

We've got the sedation still available, but obviously it's not running at the moment. So it's just NORAD at the moment.

00:04:49 Doctor

OK, so blood pressure is supported.

00:04:52 Doctor

Worried about...so your main concern is about his heart rate?

00:04:55 Nurse 2

It just seems to be a bit into AF.

00:04:57 Nurse 2

So far hasn't really affected the blood pressure too much, but starting to come down a little bit.

00:05:03 Doctor

Definitely looking irregular so it's looks like it's going into AF.

00:05:07 Nurse 2

Do you want me to draw an AM gram?

00:05:12 Doctor

We could, do you think we...NURSE TWO, do you think we can get an ECG first?

00:05:15 Nurse 2

An ECG first, yeah.

00:05:18 Nurse 2

Thank you very much.

00:05:24 Doctor

You said he's got neurosepsis, what antibiotics is he on?

00:05:24 Nurse 2

So he is on....not sure...so co-amoxiclav...um...yeah.

00:05:37 Doctor

Ok it looks like he's going into fast AF now. ECG?

00:05:42 Nurse 2

ECG here.

00:05:51 Doctor

Going into fast AF. Alright, so let's get some (unintelligible), 300 milligrams as a loading dose.

00:05:58 Doctor

And, OK, so there's just a small, slight change in his blood pressure. So I'm worried that he might become hypotensive.

00:06:13 Doctor

What did the CT do? Do you have any idea of the CT scan?

00:06:15 Nurse 2

So the 1st CT was, there was nothing discovered, he was due one later on in a couple of hours, but the first one was NOD.

00:06:23 Doctor

Fine, so let's let's try and let's try and stabilise him dynamically first.

00:06:28 Nurse 2

Can we get a nurse in charge please? Some extra help.

00:06:34 Doctor

Only because you've seen this patient before, do you have any idea what his pupils are like?

00:06:37 Nurse 2

I didn't have time to do an examination so...

00:06:41 Doctor

That's fine, I just need a chance to check what his pupils are like.

00:06:46 Nurse 2

We'll get you some more help.

00:06:48 Doctor

So his ras is still minus four and has been...

00:06:51 Nurse 2

Yes, has been since sedation's been off.

00:06:56 Doctor

Can I have a torch?

00:06:57 Nurse 1

How can I help?

00:06:59 Doctor

Hi, so this is basically a 75 year old woman who's been on the unit for 3 days, she’s been admitted with a history of (unintelligible). Unconscious in the bathroom, I don’t know there was a trauma, he hit his head so that’s a bit unclear to me. But he had a low GTS. They brought him in and they found out he had the neurosepsis. He’s on all the sepsis bundle as well. And intubated with low GTS. Had a CT which was unremarkable. But he hasn’t woken up after sedation. He’s had a bit of NORAD, blood pressure supported. He’s not on any sedatives. And when I came up, it looked like he had a heart rate of 120 and looked like it was irregular and he’s going into fast AF now. So just asked NURSE 2 to drop some (unintelligible).

00:07:49 Nurse 2

Just drawing up now.

00:07:51 Doctor

We also have to consider we might have to cardio plot if he becomes unstable and apparently he is due for another CT in an hour's time?

00:07:58 Nurse 2

Yeah, few...could be a few hours.

00:07:59 Doctor

OK. Would you mind just drawing up a gas? Just to see why that's suddenly happened. So let's draw the gas.

00:08:19 Doctor

Ok, pupils are bilaterally equal and reacting...wait hang on...so the right pupil is reacting but is slightly larger than the right, than the left.

00:08:40 Doctor

Let's just get a gas.

00:08:41 Nurse 1

Ok.

00:08:51 Doctor

So he he's he's all around the ventilator, he's got adequate hyper volumes, he's saturating them, right. Issue is just he's holding his blood pressure.

00:09:00 Doctor

So let's give him some auto and have a look.

00:09:03 Doctor

We're going to do a 12 lead ECG.

00:09:06 Nurse 2

We've got 12, we got 12.

00:09:11 Doctor

Yeah, it definitely looks like he has been into AF.

00:09:13 Nurse 2

Sorry.

00:09:17 Nurse 1

Do you need a hand?

00:09:19 Nurse 2

I just have the wrong needles.

00:09:22 Doctor

NURSE TWO, do you have any idea about his previous medical history?

00:09:24 Nurse 2

So he's fit. He's normally fitting well bit of mobility. he's fit. Nothing major stick, but normally he is on, does have a bit of history of hypertension, sorry, and he's on...

00:09:42 Nurse 2

something at home but.

00:09:42 Nurse 1

Potassium is 3.

00:09:45 Doctor

I think there's hypocalcemic that we need to supplement.

00:09:49 Doctor

Does he have a central line?

00:09:51 Doctor

Yeah, yeah. So let's, let's supplement his his potassium.

00:09:59 Doctor

Lactate is fine.

00:10:05 Doctor

All right, so let's all right, let's supplement his potassium.

00:10:11 Nurse 1

OK.

00:10:17 Nurse 2

All right, I'm ready.

00:10:21 Doctor

We're gonna load him up with (unintelligible)

00:10:23 Doctor

We might have to cardiovert him.

00:10:26 Nurse 1

Do you want me to bring the resus?

00:10:28 Doctor

Yeah, it looks like his blood pressure is dropping off.

00:10:38 Doctor

Is he on any fluids? Have he had any fluids?

00:10:41 Nurse 1

So he's got (unintelligible)

00:10:42 Doctor

Well, yeah. But is that just on maintenance?

00:10:45 Nurse 2

Yes, yes.

00:10:48 Doctor

I'd like to give him a fluid bolus as well.

00:10:49 Nurse 2

Yeah, he's been having echo guided fluid boluses.

00:10:55 Doctor

Why is that? Do you have any idea?

00:10:57 Nurse 2

It's in the plan, yeah.

00:11:04 Speaker

You want me to open the NOR adrenaline?

00:11:07 Doctor

Yes, let's do that, OK.

00:11:09 Doctor

So this map is around...let's go up...map is around 58.

00:11:13 Nurse 1

What are we aiming for?

00:11:18 Doctor

60, I mean 65 would be ideal.

00:11:21 Faculty

NORAD going up into five now.

00:11:25 Doctor

Yeah. Have we given him the bolus?

00:11:29 Nurse 1

Oh, this is potassium.

00:11:29 Doctor

Let's get him some potassium.

00:11:35 Nurse 2

How much do you want to put?

00:11:41 Nurse 1

I'm gonna have to go down there. CVP line. Just because the access...

00:11:47 Doctor

OK, fine. If you had the port, I'd still like to give them a fluid bolus if that's connected.

00:11:53 Nurse 1

So this fluid still connected.

00:11:57 Doctor

So let's bolus that for 500?

00:11:59 Doctor

Yeah. OK. Just to see if it helps his blood pressure a bit.

00:12:04 Doctor

And the other ones being loaded.

00:12:05 Nurse 1

What rate do you want the (ameode?) going on?

00:12:18 Nurse 1

No. Is it? Isn't it faster? Yeah.

00:12:20 Faculty

You can give the faster, but you can. You only 300 over an hour and then then 900 / 20, yeah.

00:12:33 Doctor

OK, so blood pressure is picking up.

00:12:35 Doctor

Still in AF.

00:12:37 Nurse 2

Right, so AMF is running.

00:12:38 Doctor

Ok, we've got a fluid bolus going.

00:13:00 Doctor

OK, his chest is OK, oh but I see saturation.

00:13:03 Nurse 2

Yeah, just a little bit

00:13:09 Doctor

So he's still...he's still giving tachycardia

00:13:13 Doctor

Can we increase this too, so it's 30, can we make it 100%?

00:13:42 Doctor

I'm happy with the air entry.

00:13:43 Doctor

Can't really make out anything.

00:13:47 Doctor

He the tube has been fine, so he didn't really have an issue with that and so Airways, yes, his airway secure and he's he's feeling OK even sheet was fine it's not hypoxic.

00:13:56 Nurse 2

Line occlusion.

00:14:07 Doctor

We do know, airway breathing. Circulation is the issue now, he is fast AF, blood pressure is being supported with NORAD and we're giving him a fluid bolus.

00:14:18 Doctor

He is the background neurosepsis and hypertension. He's on antibiotics, NURSE ONE, If you're happy, could you just have a look in this last, just as his last electrolyte? Like, his magnesium and phosphate.

00:14:31 Doctor

I just want to rule out anything else.

00:14:35 Doctor

We supplemented his potassium. 00:14:38 Nurse 1

It's on the gas.

00:14:41 Doctor

Sorry, what's his urine output like?

00:14:43 Nurse 2

Urine output has been fine with the map that was about 70-75, it's now 50.

00:14:47 Doctor

OK, fine on all those other parameters? They were all alright?

00:14:51 Nurse 2

They were all fine, yeah.

00:14:51 Doctor

Yeah. So his main issue was he was not waking up.

00:14:53 Nurse 2

He was not waking up post.

00:14:54 Doctor

He was due for his CT, but we can't send him for a CT in this sort of a condition. We need him to get... We need to get him back into sinus rhythm.

00:15:06 Doctor

Before we can do anything.

00:15:09 Doctor

So it's just a question about do we want to cardiovert him or not?

00:15:16 Doctor

You've just given them the amiodarone, was still going back to hypertension.

00:15:20 Doctor

Think we're going to have to cardiovert him.

00:15:23 Doctor

OK, ideally, is anyone, are you familiar with cardioversion?

00:15:28 Nurse 2

I've only seen it.

00:15:29 Speaker

No.

00:15:31 Doctor

That's fine, OK, so ideally we would sedate the patient but in his case that's ruled out.

00:15:35 Doctor

Let's go ahead, let's get that. Are you happy to do that?

00:15:43 Doctor

Let's just let's attach the leads.

00:16:03 Doctor

Do you know do you has got a background of some sort of ischemic heart disease or?

00:16:07 Nurse 2

I wasn't handed over anything.

00:16:09 Doctor

He's just hypertensive, so you know.

00:16:19 Doctor

Are you happy if I just come around?

00:16:23 Nurse 1

Yes

00:16:32 Nurse 1

Did you want me to go up on the NOR adrenaline?

00:16:34 Doctor

I'm not very familiar with this.

00:16:40 Doctor

Yeah, defibrillation. We'll start a little bit.

00:16:44 Nurse 2

Do you wanna keep the noradrenaline the same?

00:16:47 Nurse 1

Maps 55.

00:16:49 Doctor

So we have increased it, so we can increase it a bit more.

00:16:53 Doctor

I think since we're going to cardiovert, it doesn't matter at this point.

00:16:57 Doctor

OK, I I'm not ready.

00:17:01 DEFIB AUTOMATED VOICE

15 seconds without sign of compression.

00:17:10 Doctor

Hey guys I need you to stay clear.

00:17:15 Doctor

Does it tell you when to shock?

00:17:25 Doctor

Ok charging.

00:17:30 Faculty

It’s ready to deliver the shock.

00:17:38 Doctor

Does it not say shock delivered? It showed?

00:17:40 Doctor

It it doesn't say, OK.

00:17:44 Nurse 2

OK, we're back in sinus rhythm.

00:17:45 Doctor

OK, we've got 16, right? So we need to work out why this happened to this chap.

00:17:51 Doctor

And and so I need. I just want. I'd like to have a look at his labs. Just to have an idea.

00:17:57 Nurse 1

Have they come through, the labs?

00:17:58 Faculty

I'll see if I can find the labs, what are you particularly interested in?

00:18:03 Doctor

Interested in his electrolytes, renal function? His his all haemoglobin, all his...

00:18:14 Doctor

It's going back down.

00:18:17 Doctor

Yeah, he's gone back into fast AF.

00:18:21 Doctor

Fine, we'll cardiovert him again.

00:18:28 Doctor

I'm going to go to a higher energy.

00:18:42 Doctor

Hold on, synching.

00:18:52 Doctor

Everyone clear?

00:19:05 Doctor

Charge delivering, everyone clear.

00:19:19 Nurse 2

He's got a strong pulse.

00:19:24 Doctor

He's still in fast AF.

00:19:47 Doctor

So I'm just thinking out loud, we're delivering, ventilator fine, still unstable

00:19:59 Faculty

Bloods are here, there's nothing...bit of white call

00:20:03 Doctor

OK, he's still in fast AF. Cardioverted twice. Not reverting back to sinus rhythm.

00:20:13 Doctor

We need to find out the causes of that.

00:20:16 Doctor

And get him back into sinus rhythm soon.

00:20:22 Doctor

OK, so I'm just going to go for the third cardioversion, OK. The third shock, still the same... 200 and charge.

00:20:36 Doctor

Charging, delivering a shock.

00:20:51 Doctor

Start CPR.

00:21:11 DEFIB AUTOMATED VOICE

Release pressure between compressions.

00:21:24 DEFIB AUTOMATED VOICE

Compress slower.

00:21:45 DEFIB AUTOMATED VOICE

Release pressure between compressions.

00:21:51 Doctor

OK, so we know he went into asys, we've started chest compressions.

00:21:58 Doctor

I need to give him adrenaline.

00:22:07 Faculty

That's adrenaline given

00:22:09 Doctor

Yeah. We'll do CPR for two minutes and then do another rhythm check.

00:22:19 Nurse 1

We've got blood pressure back. That’s 100 and 75.

00:22:25 Nurse 1

Sats 95.