Case based discussion transcript

Helen: Hello Mr Hayes. I know you came in for the case that we've just been dealing with. I was wondering if we could do a case based discussion about it?

Mr Hayes: Yeah of course. And I think it'd be an excellent case to discuss. Helen, obviously you'd been with us for about five or six months now. And obviously we don't work together directly that much. I'm mainly on day ward. Just to remind me, what year are you STR wise?

Helen: I'm an ST 4.

Mr Hayes: Okay. That's fine. Do you want to just maybe run through the background of the case and tell me what's been happening?

Helen: Will do. Okay. So when I came on shift last night there's a 28-year-old lady who's a para 1, had a normal uncomplicated pregnancy in her first pregnancy – normal delivery, no problems at all. And she was 37 weeks with dichorioamniotic diamniotic twins. So far antenatally uncomplicated. Medically fit and well. No surgical problems. Not on any medication. Not allergic to anything. The twins were well growing. The last scan was a couple of weeks before. And she came in because she was sent in by her community midwife with raised blood pressure. About 140/85 when her booking was much lower than that. At the time she presented, she didn't have any proteinuria. Her bloods were taken and a BP profile done.

Mr Hayes: And how long ago was this now Helen?

Helen: It was yesterday morning.

Mr Hayes: Yesterday morning. Okay, right.

Helen: Her bloods came back as having very low platelets. So they're about 50 on the first set of bloods. Her ALT was kind of 35 so at the upper limit really. And her creatinine was slightly raised as well at about 95. Throughout the day she had more blood pressure readings. And her urine was re-dipped and she had three pluses of protein and her blood pressure was still raised at 145/95. So a decision before I came on duty was to induce her. The consultant haematologist - it had been discussed with him as well. She'd had some platelets. She'd been brought around to the HDU and she'd been given a Prostin to start labour off. Both twins were cephalic on scan.

So when I came on duty I examined her. She was asymptomatic but with hyperreflexia and three beats of clonus. Contracting well with having had the Prostin. So she was fluid restricted. Catheter was inserted for urine output hourly. And magnesium sulphate was started. I examined her and ARM'd her and she progressed very well. Both CTGs of both twins were quite nice and normal throughout the labour. And when she started to get an urge to push she was examined. She was almost fully. She was taken to theatre.

Mr Hayes: Right. And how long later was this?

Helen: It was a couple of hours after I came on shift so....

Mr Hayes: So she's got on quite quickly....

Helen: Yeah. Quite quickly. A couple of hours after the ARM. Taken around to theatre purely for the space of delivering twins having the monitoring there continuously for her blood pressure and things. The anaesthetist was there with us obviously. CTs were nice and normal. Twin one delivered normally. And then the midwife in charge stabilised twin two. I scanned twin two's cephalic feed and waited for the head to come down to the pelvis. ARM'd, so Synto was started because her contractions were quite far apart. And when she was contracting nicely she delivered in a couple of contractions, twin two. Syntocinon was given for the third stage to help the placenta come away because we obviously wanted to avoid Syntometrine. And the placenta was delivered by continuous contraction. No PPH. EBL at delivery was about 300 and then she was transferred back to the HDU room that she came from.

And then I was dealing with a postpartum haemorrhage in one of the other rooms when I was called back to see her. I couldn't go immediately so I asked them to get the anaesthetist put in a second line because she was actively bleeding. Rub off contraction and also give some Misoprostol because we already had 14 of Synto running at that point. I went as soon as I could into the room and examined her.

The uterus was atonic. I did a V and removed about a litre of clots. By that point the EBL was probably about two litres in total. So code blue was called so everyone was aware. And I transferred her back to theatre and obviously under a general anaesthetic because of her platelets. I did an EUA. Obviously you'd been called and you were on your way in at this point.

Mr Hayes: I was. That's right.

Helen: Haemodynamically she was still stable from the anaesthetic point of view. She transfused two units, had another port of platelets and had some FFP. And I obviously did an examination. There was a little bit of placenta left at the fundus so I removed that by manual compression to try and stop the bleeding. And she had another dose of Syntocin on IV. So she'd already had 40 units of Misoprostol so she had a second dose of the Synto IV. She had some Hemabate, a second not 15 minutes later. And we gave her Ergometrine because she still was actively bleeding. And whenever I released bimanual compression the uterus just filled up with blood. So then I decided to put in an NG catheter balloon inflated with 500 mL of normal saline. And at that point things started to be more under control and the bleeding settled. And that's when you arrived.

We made the decision to transfer her back to the HDU room where she came from, obviously, and continue her hourly obs. We resent her bloods, her coagulation. When those results were back and depending on her condition I'll have a talk to the consultant haematologist again. Synto was running. The 14 was still running. And her urine output had been kind of satisfactory about 30 mL an hour. Obviously still fluid restricted at 85....

Mr Hayes: She's obviously...she's stable now which is the most important thing.

Helen: Stable, yeah.

Mr Hayes: First of all I think you've managed her really, really well. Okay. I think she's obviously been very sick and I think you've done a really...you and the team have done a really good job. A lot of things to discuss though because she's obviously quite a complex case. Let's get back a little bit before delivery. The decision was made you said to induce her. What do you think of that? Obviously...it's different in retrospect. But why do you think the decision to induce her? Do you think a section might have been more appropriate?

Helen: I think in terms of...as she was a para 1 she'd already had a normal delivery. Both twins were cephalic. Obviously a caesarean section with platelets of 35 and possibly dropping further at the time of section she would – especially if they're less than 20 – would've risked bleeding having more of a PPH at section than possibly after normal delivery. So I think aiming for a normal delivery in a para 1 was probably a good decision.

Mr Hayes: Mm-hm. Anything else about that would sort of help you make your mind up by the way in terms of section or induction? Anything else that might sway you?

Helen: Kind of examining her...see how favourable she is?

Mr Hayes: Yeah. Was she favourable?

Helen: Yeah. I think so. Obviously I didn't do the first examination. But I think the...and the way she progressed. But in retrospect....

Mr Hayes: Yeah. Obviously she certainly seemed to progress well didn't she? That's right. And in terms of the delivery, it sounds like it went very well. With the postpartum haemorrhage, do you...? From the point of delivery what would you...in someone with this kind of story – obviously quite high risk – what would be your management plan literally after you deliver the babies and the placenta? How would you want to manage that? Knowing well what's happened with the postpartum haemorrhage.

Helen: I'm not sure kind of what were you meaning?

Mr Hayes: I mean I think if.... You know she's at risk of postpartum haemorrhage. What would you do at that point? What should we be doing at that point to try and prevent it rather than deal with it when it happens?

Helen: In terms of she had a 40 units Synto infusion started to try and maintain uterine tone and monitoring her closely, really. Is there anything else that you would suggest?

Mr Hayes: No. I know.... It's whether there's anything else prophylactically that you think might be appropriate? You think Misoprostol at that point might've been...?

Helen: Yeah. Maybe.

Mr Hayes: Yeah. Okay. And then obviously once she started bleeding, you mentioned some of the measures that obviously been...I think overall she had been managed very well. You mentioned Ergometrine and Hemabate. Tell me about the rationale for the use of those.

Helen: In terms of obviously they're part of the protocol to manage a massive postpartum haemorrhage. But in people who've got deranged liver function, renal function or high blood

pressure you need to use them quite carefully. Because obviously it can exacerbate high blood pressure and cause them to have, if their blood pressure goes very high to have a stroke or something. But at the same time you've got the balance of stopping someone bleeding. So I think if you can't get things under control then you're forced into a corner of kind of having to use them really.