Ward Platt

PAIN INQUIRY

Transcript of Audio file

Maria Caulfield : Hello, is that Dr Ward Platt?
WP Yes, speaking.
Maria Caulfield Thank you for joining us, my name is Maria Caulfield, chairing this session. I have got a few colleagues with me: I have got:
Fiona Bruce, MP for Congleton, Lord Alton, James Evans, who is our inquiry Coordinator. Are you happy for us to record this so that we are able to take accurate minutes?
WP Yes, absolutely fine, I expected you would.

Maria Caulfield Thank you very much.
I am going to gently start by asking you to outline your experience and the particular expertise you have that will help us with our inquiry.

WP OK. I wear two hats with regard to this, I think.
The first: I am a Consultant Paediatrician with specialism in Neo-natal Medicine, and have been that for the last 30 years now, and I have had a considerable interest in neo-natal pain, stress and distress. My original MD was about the response to surgery in children, and I moved on from that to work in allied investigations in the neo-natals.
And the second hat I wear is that I am the clinical lead for the National Congenital Anomaly and Rare Disease Registration service, and that is run by Public Health England, and it is if you like a subsidiary part of my role, but I have been involved in Congenital Anomaly work for the best part of 30 years now.

Maria Caulfield: Fantastic. .. so that we, just to set the scene from your clinical practice, and do you say that the first session in our enquiry chooses (?) , could you outline what the difference is between foetal pain and foetal awareness: are they different? and mutually exclusive, or are there different time points . . that in your experience these terms cover?
. . .

WP 31:33
So, Foetal awareness and foetal pain: As a neonatologist I look after a lot of little people who should have been foetuses but got delivered very early, down to around about 23 week mark and in Newcastle upon Tyne, and indeed in our region, we do quite well with the survival of these babies born into 23 weeks and if you are born alive and make it into special care, and if you are born alive then you do make it into special care, then on our patch the survival is around

60%. So that is an important place to start. And the second most important thing is that we have had two survivals at 22 weeks in our region. And that is probably not a million miles different to what other parts of the country experience. So I am familiar with the way these very small people behave, and we have to assume that had they stayed in utero their experience would in some ways to their behaviour would be in some ways analogous; that is clearly only partly true, so to begin with most demi-prem babies born before 26 weeks will been there. So below that you are born a little bit like a puppy born with your eyelids fused, and therefore necessarily cannot see, although we assume that there are other modes of sensory awareness, and we believe from what we understand of the neurological development that around about this time, there is no sharp cut-off, there is a general development of something approaching conscious awareness, and this is important because if you stimulate or touch an extremely prem-baby or manipulate a foetus right down these extremes of viability, 23 or 24 weeks. Although they may respond to you we cannot be sure unfortunately that this is in the same conscious sense that an adult or a child would respond. In other words you would respond by reflex at the level of the spinal cord and of the very basal structures of the brain.

Now we do this even if, as adults after an anaesthetic they are still functional, to a degree, depends how deep the anaesthesia is, and therefore we have got to be a little bit careful in trying the responses that are generally conscious, in the way that you and I would understand that term, and our responses, but driven by lower structures that do not correspond with consciousness, and when we are discussing a concept like pain or awareness or consciousness, we are implying functional cortex. In other words you have got to go beyond those responses of the lower structures, and to the extent that we understand what is going on with extremely premature babies, we can as adults looking after them, we can sense the progressive development of consciousness that becomes a little bit more what you and I would regard as consciousness over the weeks from 23 into 24 into 25. So I would be very hesitant to give a firm cut-off. I think it is a progressive developmental progress and process, and the notion of pain as experienced by us is probably developing during this time. Does that make sense?

Maria Caulfield Yup. That is very helpful.
Fiona, do you want to ask . . .?

Fiona Bruce: I am very interested to know how you would consider: an unborn child of the same age as the same as the little people that you care for. experience pain, and what the difference sensations and what the difference might be and how you can ascertain that.

WP Work has been done on foetuses and you have to remember that I am not a foetal medicine specialist: I am a neo-natal specialist. But there are several crucial differences. You can really only observe foetal images by ultra-sound, and that is not at all these days: in fact I would go so far as to say it is pretty extraordinary what one can visualise using ultra-sound. But it is not the same as seeing a tiny baby in front of you, and seeing their expressions and their behaviours in the whole body. That is the first thing I have to say.

In interpreting the images we see in ultrasound, we have to be careful not to draw too many parallels to what it is like in the big outside world. …

FB so what evidence do we have that a fetus of the same age might be capable of suffering?

WP this is a key question and its a really difficult one to answer and its very easy to become dogmatic based on extrapolation from what we really know. And what we really know is actually a bit limited. We know that a fetus can produce a hormonal stress response. But we also know of course, that is in older people, you don't need conscious awareness to do that. We equate the biochemical responses that we call stress responses to something that we might describe as suffering or pain. Suffering and pain as we use these terms and expressions in the pain world and I..I used to be a member of the Pain Society. I did quite a lot of work with chronic pain in children in the clinical sense so I have a pain background as well. When we conceptualise pain and suffering it is very much with an emotional component as well as the physical component. The physical component requires an active and functional cortex to generate it. So we've got to be quite careful between, distinguishing between the response which a very non-sentient organism can do and experiencing suffering which requires something rather more which is where cortical function comes in. Now in neonatal care, we default to the assumption that it is better to assume the possibility of suffering and to get in there to treat it regardless of whether we're right or not because it's better to overtreat something that's not happening than undertreat somebody who would otherwise be suffering because they can't actually tell us, we will give the relevant drugs, like morphine, first and ask questions afterwards to be honest, because that way we feel much safer in the sense of actively not causing suffering and actively treating it if is there before worrying too much if it is there because we're treating it anyway.

FB that's very helpful and thank you for that and for all your assistance your giving us today. Just to go back to my last question which was what evidence we have with regard to sensations or experiences that unborn children are feeling. What analyses have been done?

WP Ok, there have been a variety of things, there have been a number of follow up studies largely related to the experience of premature babies with it has to be said a variety of different results we believe that the experience of pain and indeed its treatment of its modulation does have long term effects on the way children behave on their threshold and sensitivity to pain. Separate from the studies that are being done, clinically, when you actually do follow these children up its very hard to, to distinguish them from other kids. They don't come across as a group as having wildly different characteristics in relation to the way they respond to the things of childhood, falling over, scraping yourself, banging yourself and so on, they exhibit the same spectrum from stoical to er whatever you choose to call the opposite of stoical…. easily affected by painful experiences, let's put it that way. So they exhibit the same spectrum. When you follow them up and you do careful measurements, there are clearly some differences so in a scientific sense you can say that but actually how they translate into experiences of life is a very different thing and broadly speaking children who have been born very prematurely, have gone through pretty unpleasant experiences turn out remarkably nice and normal. It is one of the great

privileges of following them up you know you see this .. so I'm hesitant to over emphasise those long term things. We do know one or two very important things though. We do know that at certain gestations fetuses become capable of an awareness and of memory storage. This was first demonstrated by Heppel's group back in the 80s with a famous, perhaps infamous, experiment where they exposed fetuses to the tune to the soap opera Neighbours… you can imagine when that hit the newspapers.. that was the first time that people were able to demonstrate the exposure to something moderately complex, like a theme tune, on a recurrent basis could be shown after birth to be differentially appreciated by those fetuses who had been exposed to it than those fetuses who hadn't. And that, if you like, was the start of what has been quite a long and productive set of scientific experiments in which people have tried to understand better what fetuses can be aware of and how they may process and memorise that and you measure that with how they respond after delivery. So there is a corpus of work showing that is if you like of fetal capability certainly from mid trimester. It gets much more difficult when you get down to these gestations which we often describe as limited viability, 22, 23 weeks or 25 weeks.

Fiona Bruce: well thank you very much...just a final brief question from me, you spoke about mid trimester, could you just clarify what age the children were exposed to the Neighbours theme tune?

WP I was afraid you were going to ask that, I realised that was a crucial part of it, I do not carry that in my head. It would be quite easy to look up. Journal - back in the 80s: I have got the reference sitting on my computer somewhere.

Fiona Bruce: Thank you.

Ld A So far really fascinating, and that last point brought back: Yehudi Menuin once said that he learnt his love of music in his mother's womb. Can I ask you something specifically relating to the last time there was an enquiry of this kind, 20 years ago, when Dr KS Anand who was one of the leading experts ... on foetal pain anywhere in the world. gave evidence. As you have said, on the precautionary principle: if you do not know, avoid pain. From that point in gestation I won't tell you what he said when he thought it was prudent . If you were giving your advice, when would you say it would be prudent to avoid any risk of pain or suffering?

WP You mean in weeks of foetal development?

Ld A What age?

WP Yes - Sunni Anand and I do know each other quite well, as you might expect, and we have worked together and we have shared platforms . . . where each other comes from on this one, and while it is extremely difficult to say I would be concerned if I was not administering analgesia in gestation that I see a baby... so that the balance starting point that would have to ... extend down to 22 weeks. That does not mean that this time might be completely different.

So I would certainly say at least down to there.

Because of what we know about the development of the nervous system, I would probably allow another month before that in my own mind, I am really thinking about from the 18-week mark. I think it is more difficult to build a case for foetal analgesia in relation to instrumentation much before then, but if I were a Mum and somebody was doing something like that I would think that I would be pretty insistent that you treated by fetus of 17 or 16 weeks as a precautionary principle. Partly speculative I have to say, but I think that would be my answer to you.

Ld A That is really helpful, and I am grateful to you, and can I take it a little bit further, and say that because in these last two decades there have been extraordinary developments in utero which has been heart-warming to see, instances of the baby being removed from the womb, and being put back in and all sorts of developments taking place which have never been done before. The science has been moved on, and the medicine has been moving on, and very exciting. What I do not understand is whether hypothetically speaking, during surgery in utero, when do you think consultants won't administer analgesia and just use muscle relaxants, and can you tell us about the evidence?

WP We are trespassing into territory where I would not regard myself as familiar. I have not worked closely with the people doing foetal surgery, nor with the anaesthetists that are necessarily associated with that. We have to bear in mind that in order to administer foetal anaesthesia, or analgesia, a normal delivery is via the mother. Now it does not absolutely have to be, because instrumenting a foetal baby is something that people do: people give foetal blood transfusions. For example and so it is not an outrageous thought to be giving . . . to a foetus.
... to the mother. If you just give it to the foetus it will dialyse out through the placenta, so you lose some of the value .. if that is what you do. So the normal route of administration is through the mother. The most important drug to give is a powerful opiate such an Fentanyl or alFentanyl is known to cross the placenta quite effectively . . . as ... good choice and if there is a muscle relaxant and as far as I am aware I am on slippery ground here: I do not think . . . the muscle relaxant given to the mother does cross the placenta, but I could be shot out of the water by an anaesthetist on that one. So the main thing to do is to give something that is going to abolish any prospect of the perception of pain in the foetus being aborted or instrumented. As by far and away the best way to do that. I would do that, and again I would hope that that would be true in any gestation you would contemplating a hysterotomy and fetal surgery

MP What is the earliest . . . . we would be able to take the baby from the womb and carry out surgery?

WP I will have to say "Pass", because whatever we choose, someone will have done it earlier. (laughter!)

Lord A Well . . . I think we . . . enquiries about them. If I may about the 2007 Science and

Technology Committee Report which you probably had a chance to look at today, which related to scientific developments, and how they converge with the abortion issue, and I wondered what information regarding foetal awareness you felt was either missing or not properly understood by both those who were looking at the final paper and we have been joined by a colleague . . .come and sit here - I do not know if you can see all of us here . . .
I have got two of you . . .We are fortunate . . . I am not sure about .. . .
It is the 2007 Science & Technology Report I was asking you about . . . misrepresenting opinion.

WP There is an awful lot in there and in a sense the answer to your question is "everything". We do really need to know about everything. And the trouble is these are very tricky areas in which to research. It is not wildly difficult to measure hormones and you can go on measuring different kinds of stress hormones in a sense until the cows come home, but you don't actually take the fundamental question further as to what is their consciousness? We are in the position to scan people, including people, including foetuses, with ever more sophisticated techniques such as functional MRI, and one might like to think that would give us some . . . , making stress response . . . and experiencing suffering which requires something rather more . . . before function comes in.

Now in neo-natal care we default to the assumption that it is better to assume the possibility of suffering and get in there and treat it, regardless of whether we are right or not, because it is better to over-treat something that is not happening than to under-treat something to somebody that would otherwise be suffering. We will give the relevant drugs like morphine first, and tackle questions afterwards, to be honest. Because that way is much safer in the sense of actively not causing suffering, and actually treating it if it is there. And we are not worrying too much whether it is there because we are treating it anyway.. … Everything - we need to know everything. We are in great danger with MRI of over-interpreting what we see, and it might actually be . . . 54.40 rather than standing back . . . which is a little bit what you see when you look at a very tiny baby and you do not . . ..
is this movement a conscious awareness movement or is it a spinal reflex? . . . .
It is true to say, as a human we are almost programmed into . . . reading behaviours and images is not necessarily . . . but it is what we . . . and want to see. So we really need to be careful about this. So better imaging is clearly a very important and has moved on since 2007 so I think that is one area that caveat. (?) It would be nice to have better physiological information and I have to say that in my other role as journal editor, I see an awful lot of papers coming by with really very poor . . .physiological information and again people trying to over-interpret and be simplistic about what they . . on with and with babies head and the baby's brain . . . and it is possible to do with foetus . . . . , , , , pretty much in gestation and I guess those . . . will be feel . .. . where I would say we must not rest upon our laurels, and push for ever better information. We have to be so careful . . . 56.13.

Man Thank you so much, that is really helpful.

Woman Thank you. Jeremy, I know you join us . . . Do you have . . . Was there any question you wanted to ask Dr Ward Platt ?

Jeremy No, I don't think so.

Woman Just a final question from me: . . . a lot of evidence and your experience. From all your experience, are there any recommendations you would like to make to change the law or guidelines to be introduced to eliminate the possibility of foetal suffering during abortion?

WP I think again it depends very much on what gestation we are talking about and we have to remember that this is where my foetal anomaly hat: as foetal anomaly there is no age limit on that and then your gestation . . . 57.11 than that. This is entirely my personal view and I think I am very comfortable with that, and I remain so. The caveat is always the way which that is done, and therefore the necessary of having adequate analgesia on board.
For that particular procedure. Now coming back into pregnancy clearly there is not a good argument under 12 weeks. 57.49. Once you get beyond 12 weeks then the argument for providing appropriate analgesia then becomes if you like progressively more strong. I would emphasise this business of progressively more strong argument, I could not give you a sharp cut-off: "above that yes, below that no." I think that would be the wrong way to look at it. I would be at variance with the notion of a continuum of development.

Person OK, very helpful.
58.07 James do you . . .
58.40
James Dr Ward Platt, first of all, thank you very much for your time, your precious time. Just wanted your opinion of the current guidance on foetal awareness, which is mainly the RCOG 2010 paper?

WP Yes . . I think personally I would be more bullish about promoting analgesia. And if I really had to, at any gestation, because it is the precautionary principle again. It is about not making any assumptions about development, about neural connections where we really do not know, it is much better to administer powerful analgesia and by that means we have covered all bases. So I think that would be my response to that. and if I were to wish them to have done anything differently it would have been to have made a more general emphasis . . I think...it's very difficult to know but my feeling on that report was that it was reflecting more past views, and not necessarily evidence-based views, than it was looking forward or being to some extent based on where the cutting edge in terms of neuroscience was even at that time. I know these this take a time to gestate, but nevertheless I think it could have been more strong.
It could have been strong, it could have been more plural in its gestational views.

(f) Any other questions?
Well, thank you, Doctor Ward Platt. That has been extremely helpful and for the enquiry it has really got us thinking about the question, . . . 1.00. 1.46 . feeling what we want to say with

other witnesses. So thank you so much for your time and I know we have run over slightly, but it has been so enlightening, thank you from all panel, thank you very much. And I am sure if there are other things subsequently we are always happy to have an email. (Who says all that last paragraph ?)

WP   Yes, absolutely. If anything occurs to me, I shall let you know.

Thank you very much. Goodbye.
Hm.
Fascinating.
Um.