

COURT RECONVENED

THE COURT: Who do we have here, Mr.

Kirkham?

MR. KIRKHAM: Dr. Dzus.

COURT CLERK: Could you raise your right hand and state your full name, please.

THE WITNESS: Anne Kathleen Dzus.

ANNE KATHLEEN DZUS

Having solemnly affirmed
testifies as follows,

10 MR. KIRKHAM

EXAMINATION – IN CHIEF:

Q Now, Dr. Dzus, you are a medical doctor licensed to practise currently in the province?

A That's correct.

Q And you are a specialist in the field of orthopaedic surgery?

A That's right. I got my fellowship from the Royal College of Physicians and Surgeons in 1986 and subsequent to that I spent a year in the States subspecializing in pediatric orthopaedics.

20 Q And so that we all are clear when you say subspecializing in pediatric orthopaedics as well, the area in question in layman's terms would be what?

A Orthopaedics is - - an orthopaedic surgeon is someone who takes care of bones and joints and

muscles, so fractures, curvatures of the spine, hips, joints that dislocate. I have subspecialized to try to limit my practise to mainly children.

30 Q And in terms of trying to limit your practise as you put it to mainly children, what percentage of your practise then would deal with children?

A 75 per cent is a guesstimate. I - - I deal with adults when they're involved in trauma.

Q Now, during the course of your years in practise and residency, did you come into contact with Tracy Latimer?

40 A I first came into contact with Tracy in 1985 when I was a resident working with Dr. Wedge who was my predecessor in this area, he's now in Toronto, and we did surgery on Tracy at that time. I - - I personally don't recall it but looking at the charts I realize I was involved in her care then. Subsequent to that, when I started my own practise I first saw Tracy in 1989.

Q And in terms of your seeing Tracy in 1989 do you recall, I guess, the nature of the visit?

50 A I'm one of the consultants at the Kinsmen Children's Centre where we see lots of children like Tracy with multiple handicaps and she came to what we call the orthopaedic clinic there for me to

assess her along with other members of the team including the physiotherapists.

Q Now, how would you describe Tracy?

A Tracy in terms - - had an affliction, as we know, cerebral palsy and this is a lifelong affliction.

She had on of the worst forms of cerebral palsy in that she was totally body involved. Her total body was involved from her head right down to her toes so all four limbs, her brain, her back, everything
60 was involved so she was as severe as they - - in the classification that we have for cerebral palsy.

Q And you used the phrase, “a lifelong affliction.”

A Right.

Q And in that regard in terms of cerebral palsy, I guess, is it progressive in terms of getting worse or is the extent of the affliction that one has at a certain age, for instance, sort of youth –

A It's - -

Q - - remain with you at that stage?

70 A It's a - - it's a changing disease. There's been at one time insult to the brain that causes the original damage and if you look at the brain as the computer of the body it's been damaged and so the signals going to the body are abnormal but the disease itself can change or the manifestations of

the disease can change as the children grow.

Q And when you refer to the manifestations, pardon me, changing as they grow, can you illustrate what you mean?

80 A We know that in totally involved children, 70 – 75 per cent of them will develop a scoliosis over time. A scoliosis is an abnormal curvature and rotation in the back so in simple terms if we look at a normal back it has a normal hunch at the top and a normal sway at the bottom when you look at it from the side but if you look at it from front to back it should be virtually straight. The children that develop a scoliosis becomes C shaped and 70, 75 per cent of totally involved spastic
90 quadraparetic children like Tracy was will develop this scoliosis. Not all of them do but the majority of them will develop it and Tracy was one of that that had it. Plus a similar percentage, 75 percent I think is the number that's quoted, of the totally involved, totally dependent children, will also develop a subluxated or dislocated hip over their lifetime. The hip is originally normal and in joint but because of the muscle imbalance, the abnormal signals that are coming to the - - from
100 the brain to the muscles, the hip over time will dislocate.

Q Now in terms of the assessment that you did back
In 1989 when you examined Tray - -

A May I refer to this? This is my hospital - - or my
Records from the clinics.

MR. BRAYFORD: I have no objection.

THE COURT: Yes.

THE WITNESS: Okay. I saw her March in
1989.

110 Q MR. KIRKHAM: So in terms of the assessment
in March of 1989, at that time was she displaying
the scoliosis that you've referred to?

A She was eight years old at the time and her
scoliosis was measuring 50 degrees, five zero,
which is a significant scoliosis, like significant
curve.

Q And in terms of the hip situation at that time and
displacement?

120 A If you think of a scoliosis curve from - - if
you're looking at it from the back, the spine
curves like this. The pelvis is joined to the
spine and the pelvis can become oblique. Instead
of being level with the seat or the floor it
becomes sideways and she was developing that
already. That can add to the problems of the hips
and we note that we - - that she was developing the
windswept deformity and the pelvic obliquity and

we were worried about the range of motions of her hips at that time.

130 Q Was there any plan taken at that point in terms of addressing those concerns?

A Yes. We actually arranged for her to have surgery to try to balance some of those muscles around her pelvis in order to prevent that pelvis obliquity, the hips, from possibly progressing on to Dislocation.

Q And did the surgery go ahead?

A The surgery went ahead and that took place in February of 1990 where she had multiple soft tissue releases, lengthenings of various muscles in her 140 lower extremities, to try to balance the stronger muscles against the muscles that were not functioning as well.

Q And I guess when you say soft tissue releases - -

A Lengthening tendons and releasing muscles. If - - if - - to simplify things, if we - - if you've got an elbow that wants to bend all the time, the muscles in this side are a lot - - I won't say stronger but are receiving more signals from the 150 brain to bend, bend, bend compared to the ones that are saying to extend so what we can do is weaken the muscles by either lengthening the tendon or actually sometimes even cutting the

tendon completely or cutting the tendon where it joins to the muscle just to allow that muscle to lengthen and gain more range and allow the muscles on the other side to have a better chance of functioning so that's what we mean when we say we balance the muscles.

160 Q From your examinations and followups, did she benefit from that?

A She appeared to. She - - if I look back in my notes she - - she appeared to be much more symmetrical after that. We were able to get her leg into a neutral position whereas before we couldn't so at that point we thought we were - - we were - - we were happy with how things go. A January 1991 note saying she has done well from the releases and I was happy with how she was looking at that point in
170 time. She still had her scoliosis and that was a concern.

Q Was - - and at that point after doing the soft tissue release, was there any planned action or course being taken regarding the scoliosis?

A We were - - we said her scoliosis remaining flexible but is still worrisome and we planned to see her again in about six to nine months with another x-ray of her back.

Q And the next appointment then or examination?

180 A The next time I saw her was in March of 1992. She was now 11 years and four months. We commented that her pelvic obliquity, the angle of her pelvis, was much improved but despite of that her right hip is now more - - I won't say more dislocated, subluxated which means partially out of joint, so despite the muscle balancing , her hip was continuing to go on its merry route of trying to dislocate and this is quite common in children with cerebral palsy. Despite you doing everything that
190 you know how, sometimes the hip is just destined to go out of joint.

Q At the March examination, was there a decision made on surgery for the scoliosis?

A There was. Her - - her curve was now up to 67 degrees. It was - - we felt it was still flexible. When you lifted her up and let her be suspended the rib hump that was with it would decrease and the amount of curvature would decrease and because it had progressed from 50 degrees to now 67 degrees,
200 that is a significant increase and the worrisome part is that if you do nothing about this back once they've reached - - the curves have reached this magnitude they will continue to increase, okay, and they can increase quite rapidly and - - and unrelenting to the point

210 that the rib cages will press on the pelvis and those then can become quite painful. It's much easier on the surgeon and on the patient and on everybody involved with the care if we operate when the curves are still relatively flexible and are smaller numbers, now, this is still a big number, rather than waiting till this curve gets to 90 or 100 degrees.

Q And surgery was scheduled for when?

A August of '92.

Q And did it take place at that time?

A It did.

Q And performed by yourself?

A By myself.

220 Q And how would you describe the results of that surgery from your point of view as the physician?

A It was very satisfactory. Tracy - - we reduced Tracy's curvature. When we saw her now in August and admitted her for the surgery her curve had increased still more and was up to around 73 degrees so even in the few months from waiting to get into surgery to the time of surgery the curve had increased. At surgery we got it down to around 15 degrees by putting in stainless steel
230 rods and multiple wires to put the back straight and to fuse it in that position. This is major

surgery.

Q In terms of the method of dealing with it that you refer to the rods and that, is that the standard medical way of dealing with the scoliosis?

A For the children that are totally involved, cannot tolerate braces, cannot - - need to get up quickly after surgery so you have to have very strong implants, this is one of the best ways to deal with it as it is a very, very strong method of fixing the spine.

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Q And, I guess, how did the surgery go and what were the results?

A Her surgery took around seven to eight hours. **She lost around three litres of blood and that was replaced.** Her results were good. She was home about six days after - - she went home, was discharged, on the sixth post op. day which is very good. Most of the children with this magnitude of surgery go home at about a week to two weeks afterwards so Tracy came through it very, very well. Not to say that it wasn't easy on her but compared to other people she - - I was happy with how she did. The complications rate for this particular surgery is very high. Tracy was lucky and had no complications that were of significance. She had some post operative

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260 vomiting and she did have some seizures after surgery but Tracy has a long history of seizures so this was not totally unexpected.

To put the magnitude of surgery in perspective, if you have a scale of one to 100 where one is the removal of a mole or a wart and 100 is a heart transplant, scoliosis surgery on a normal adolescent would probably rank 70. scoliosis on somebody with totally involved cerebral palsy would rank in the order of 90 in magnitude. So it is significant surgery.

270 Q How soon after did you next see Tracy then in terms of followup?

A Her surgery was August 27th. She was discharged, I think, November second, and I saw her September sixth – just - - that doesn't make sense. She was -- August 27th, she was discharged, September second, 1992, and I saw her September 16th which is about two weeks which is my standard followup post operatively. I see most of the children I operate on two weeks after surgery.

Q And when you saw her on the 16th how was she?

280 A I have recorded that she was doing quite well. she was not vomiting anymore and was sleeping quite well through the night. She was sitting easily in her chair and the plan was to have her

going back to school within the next few days.

Q And - -

A Her wound had healed, her back clinically looked very straight and we were able to move both hips through an almost full range of motion though she was a little tentative about putting her right hip flat but this has always been her troublesome hip. and the x-rays at that time were quite satisfactory.

Q The next follow up exam?

A Was November fourth, 1992, which is approximately two months from then. Again, she was still improving. She was able to sit for unlimited periods of time and that's an important thing to note because the children that have severe scoliosis with the total body involvement will find sitting very, very difficult. They'll sit for a few hours and then make it known, by whatever way they can communicate, that they are uncomfortable and need to be adjusted and moved and that so one of the goals of surgery is to increase their sitting ability and sitting time and so it appears that that had happened. We were - - she was sleeping better at night but we were still concerned about her right hip. Her range of motion of her hip was improving but she was

310 uncomfortable when we moved her hip at that time.

Q How frequent - -

A And at that point in time in November we were already talking right hip surgery but we were wanting to wait for her to be fully recovered from this major spinal surgery before we undertook her hip surgery.

Q And, I guess, when you say or use the phrase Wanting her to be fully recovered - -

A It - - **when you lose three litres of blood or require three litres of blood, that's more than somebody Tracy's size would have had circulating in her own body** plus we - - the rods are there to hold the spine straight but the body itself has to fuse the spine. That means repairing and throwing - - or laying down bone as a broken bone would heal to allow that spine to fuse and that does take six months to one year on average so the worrisome thing about doing another major surgery in a short period of time is that her body would not tolerate it

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Q Your next examination by way of followup would be when, doctor?

A February of '93. And the main complaint at that time was pain in her right hip. She had not really changed much from her November visit but

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her pain was a big concern. She was still having seizures. There was severe spasticity. Basically unchanged. The right hip was dislocated and we were concerned about it. Reconstructive surgery or the hip was again discussed with family and we decided to wait the full year as originally planned and we scheduled her to see - - I scheduled - - was scheduled to see her again in the fall of '93.

Q And dealing with the back surgery at that time in February how did she appear then?

A We were - - everybody - - all the indications are that she was recovering quite nicely from that and doing well.

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Q And in terms of, I guess, your next examination or her in the fall of '93, that would have been the next time you saw her?

A That's correct.

Q And was that scheduled, I guess, in anticipation or preparation for surgery regarding the hip?

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A I suspect it was. I can only go by my notes saying that I saw her in February her next appointment would be scheduled for the fall of 1993 and we had already discussed the possibility on several occasions of addressing the hip problem at her - - at a year from her back surgery.

Q Had any matters arisen that there was any visitations to you from February until the fall?

A I cannot answer that because I was away for the summer of '93 having my third baby so - - so I had other people taking care of my practise at that time plus their - - Tracy was taken care of by a whole team including her family doctor and the people at Kinsmen Children's Centre so if there would have been a problem I would have hoped that
370 that would have been communicated that way.

Q When in the fall of 1993 was it that you next saw Tracy?

A October 12th.

Q And, I guess, would you describe for us that visit and how Tracy was at that time?

A The biggest thing that I remember from that visit is **how painful Tracy was**. She had changed substantially from the visit in the spring to this visit now. She was lying on the examining table
380 when I came into the room. Her mother was holding her right leg in a fixed flexed position with her knee inn the air and any time you tried to move that leg Tracy expressed pain and her way of expressing pain was to cry out.

Q And I take it you performed an examination at that time, particularly regarding - -

390 A Correct. As limited an examination you can do without causing more pain. We - - we got her left hip - - it actually had a nice range of motion and was not a problem but her left hip range of motion was excellent, had some spasm but not enough to worry about but every time we tried to move the right hip she was very resistant. Resistant to any change of position and we basically got no range at all because it was too painful for her.

Q And this is the same hip that had been causing the problem

A That had been troublesome for at least a year.

Q And how was she aside from that in terms or - -

400 A She - - we were happy with her back. We were a little concerned because she no longer would lie on her right side so she was always lying on her - - on her left side and there was concern that her skin on the left side as starting to break down. She - - as far as her general health had been the comments from mother was that she's actually done very well with respect to her back and didn't have any colds or sicknesses over the winter and that again is another important statement because when
410 children get severely deformed in their back and are now having difficulty sitting they also have more difficulty swallowing and clearing

secretions, eating becomes a problem and these things can all end up in the lungs and cause problems there so it looked like we had been helpful in one way in keeping her upright and that she was healthier in her chest area.

Q What were the intentions, if I can put it that way, then at the end of your examination on the 12th?

420 A The intention was to arrange for surgery to help decrease the amount of pain that Tracy was having In her hip and there are many options that you have though **none of the options are totally satisfactory** but they're the only options we have when the hip becomes dislocated and painful. The two options that we discussed were do a major hip reconstruction if the hip was reconstructable i.e. the articular cartilage, the cartilage on the joint surface was in still healthy enough shape that we
430 could put it back inside the socket so if this is the head and this is the socket, we have to put the two back together because right now it's sitting out here. When the head in children with spasticity, head of the femur or the ball of the ball and socket joint sits out of the femur - - out of the socket too long, the joint capsule and the muscles that are overlying it will rub out

440 here and change the shape of the head or of the ball part and also erode or wear away all the articular cartilage and that articular cartilage is what's important to allow the ball and the socket to move freely within each other. If that's worn away and you put the hip back in joint you're literally putting an arthritic hip back together and it's **doomed to continue to be painful**. So the option is, if the head is worn away, is then to reset that part of the head and cover it with the overlying capsule and muscle and then **just leave it as a flail joint with no ball for a ball and socket**

450 **joint** and that's called a resection arthroplasty and those two options were discussed. They're again major surgery and the results can be unpredictable but we know that with a resection arthroplasty the goal is to make them pain free and in the majority of children it is successful in decreasing their pain.

Q Did you schedule surgery?

A We actually did schedule surgery for the fourth of November. That's correct.

460 Q And any admission date set?

A We - - usually my waiting list is longer than the 12th of October to the fourth of November. That's literally two or three weeks but because of the

amount of pain Tracy was in I had a cancellation on the fourth and I thought it was only fair that we try to get this done as soon as possible for her.

We had originally scheduled her to be admitted the day prior to surgery. However, there was a concern that Tracy had lost a lot of weight over the summer so in consultation with the doctors

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at the Kinsmen Children's Centre we changed her admission date to one day prior to that so that she could be investigated for this weight loss and nutritional status.

Q And, I guess, in terms of your last seeing her then on the 12th was there anything that would have, medically speaking, prevented the surgery from going ahead at that point?

A Not medically though I still had the option from when she was admitted for this workup that if we found something, i.e. that her nutritional status was so bad or her blood level was so low that she would not survive the surgery then we would have cancelled it again and got that aspect taken care of.

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Q In terms of that aspect or concern as far as her surviving the surgery, what was your opinion on the 12th of October when you saw her as to whether she would have survived surgery?

490 A Well, I think my opinion there was that she was
too painful to do nothing so we had to make her in
an optimum shape so that we could treat her pain.

Q Were there, I guess, concerns medically speaking at
that point as far as the surgery?

A There's always concerns when you're - - when you're
operating on somebody with Tracy's magnitude of
disease in that she's lost weight, she's had
seizures, the anaesthesia part is difficult,
there's a chance of increased seizures after
500 surgery and **the pain control after surgery is also
a big factor.**

Q I guess contrasting with the situation where you
performed the back surgery.

A I think she was healthier when I performed her back
surgery.

Q Now, in terms of the attendance that you had over
the years with Tracy and the examinations, who did
you end up dealing with from the family, I suppose?

A I dealt with both parents over the many visits that
510 we'd had but mostly with the mother. I remember
that most specifically the last visit only mother
was there but I know that I dealt with the father
as well.

MR. KIRKHAM:

Thank you, Doctor.

MR. BRAYFORD: My Lord, this witness is a witness that I had understood was coming tomorrow and as a result there's questions that I'd like to talk about with both - - both with the witness and with my clients before I ask her any questions. If we can break for the noon hour until two then, please, my Lord.

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THE COURT: How do you feel about him speaking to the witness?

MR. KIRKHAM; I don't have a problem with him speaking with the doctor.

THE COURT: We'll adjourn until two o'clock:

COURT ADJOURNED UNTIL 2:00 P.M.

COURT RECONVENED

530 THE COURT: You all set?

MR. BRAYFORD CROSS-EXAMINATION:

Q Thank you, My Lord. Dr. Dzus, first of all, dealing with Tracy specifically, over her lifetime from infancy until the time of her death, was her quality of life improving during that period of time? I guess quality of life is a pretty abstract concept but what was happening to her life?

A That's a difficult question because Tracy did not

540 have the ability to communicate like we communicate
so you had to rely on actions and facial
expressions to try to understand what she was
thinking or if she was even capable of thinking.
We think she was. I knew that in her younger years
she would smile in communication, I cannot
honestly recall her smiling at me. I know that
after her spinal surgery her sitting became easier
so maybe that's one aspect of the quality of life
that you can say improved her. Her breathing
became easier in that she wasn't as congested and
550 she did not vomit as much so that quality of life
improved but now instead of being a flexible person
that can move side to side, forward and back, we
have somebody who is literally very stiff from the
top of her spine right down to the pelvis so she
has lacked - - she now lacks that mobility so that
takes away some of that quality of life, plus the
fact that she has lost weight in the summer prior
to her death and that **she was in severe pain** from
what we believe was her hip I would say that her
560 quality of life in the last year of life was
deteriorating.

Q The, if I can put it, the surgical interventions
through Tracy's life, are they treating the
cerebral palsy? Are they going to cure the

cerebral palsy?

570 A If I may quote one of the grandfathers of pediatric orthopaedic surgery, it's important that you make sure that the caregivers and the parents know that when you operate on a child with cerebral palsy, after you've done your operation the child still has cerebral palsy. We are only addressing the symptoms of the problem. The problem is stemming from an abnormal brain and the signals that it's giving to the body so she will still have cerebral palsy. It will still be as severe as it was prior to surgery but hopefully we have changed that person to the better to make sitting, lying, eating, moving easier.

580 Q Now, when - - you do operate on someone with cerebral palsy, for instance dealing with the first surgery that you were involved in from 1985, are you able to predict all of the ramifications of the surgery in advance of it?

A A good way to describe the children with cerebral palsy, and this would include adults, is that they're spring loaded so if we had the example of the arm always wanting to be bent, when you and I go to extend our arm, the muscles up here slowly relax while the muscles back here tighten up to give us controlled extension of the elbow. These

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people have a lot of stimulus to this muscle holding it flexed. They may also have a similar amount of stimulus to this wanting to extend it but we can't say that because these guys are stronger and when we release this we may end up like that. Another way to describe it is spring loaded so when we release one spring the opposite spring may take over and some of the children end up with the opposite deformity of where they started out.

600 Q What about in Tracy's case? For instance, going back to 1985, were there some unexpected effects from that surgery?

A That - - that - - actually, that spring loaded effect did happen on her right hip where before it tended to be held close to the body. After muscles were released it tended to spring out to the side.

Q And experience is always 20/20 in retrospect. Would that surgery have been done that same way if the ultimate effect had been anticipated, had been
610 known to going to occur?

A I did not do that first surgery so I cannot answer for the surgeon that did. The - - the effect of that leg going out to the side should have been a protective effect to hold the hip in joint so some people would not have necessarily considered that

result a total failure. It just made it more difficult to seat her.

620 Q I guess what I'm getting at is the medical intervention was to treat one issue and ultimately it - - it had some detrimental effect, too. That would be fair?

A It changed her. It's hard to know whether that was detrimental in the long run or whether that kept her right hip in - - in joint a little bit longer. it's impossible to know. It did make seating and caring for her at that point in time more difficult.

630 Q The - - with respect to the surgery that was being contemplated in October when you met with Tracy's mom Laura, can you anticipate the future for us? Would we be able to say with some degree of certainty this is it, we've now - - now solved her medical problem and this will be the last surgery she has?

640 A I can say with some certainty that I don't think That would happen. We know that she had lost weight, that we had one hip that dislocated. The chances of her other hip dislocating are always present and always there. Some will not - - some children who we follow along for a long time that we think are done fine will dislocate their hips

in their teenage years. Because of her weight loss if that continued for whatever reason, **I expect that there may be more surgical intervention**

- - there may have been more surgical intervention in the form of a gastrostomy feeding tube or another method of giving her nutrition that would bypass the mouth and swallowing mechanism.

650 Q I guess to put it simply, she would not - - not even be able to swallow on her own in the normal fashion. She would be force fed or - -

A I won't use the word "force fed" because that might have different connotations - -

Q Right.

660 A - - to different people but cerebral palsy, to the extent that Tracy had, affected all of her muscles from - - she had a squint, i.e. one eye went sideways. That's from the brain damage to the head affecting the eye muscles, the swallowing muscles, the cough muscles, every muscle there so she did not swallow like the rest of us so feeding was a difficult situation.

Q The - - as I understand it, one of the primary reasons for the, if I can put it, the immediacy of the operation being that it was, you know, going to occur in November much sooner than what it had normally been scheduled and - - just the fact

670 that the operation was occurring at all was pain management and I guess one of the things that would be going through my mind at least is the ability to manage the pain in other ways through, for instance, the use of drugs and **why or why not is that an option?**

A The - - **Tracy had severe pain. To control it with drugs would mean using fairly powerful drugs. She already was on anticonvulsant, antiepileptic medications to control her seizures. Combining drugs can have side effects. One can add onto the other. She already in the past was having difficulty with swallowing. We know that she had difficulty clearing some secretions from her lungs, nose and that and these children can gag on their own secretions. If you depress, by using strong drugs, some of these very primitive reflexes then you put her at risk for aspirating, getting the contents of stomach food into her lungs and ending up aspirating pneumonia, ending up very sick, depressing the respiratory function that, already**

680 - -

690 Q So - - I take it the use of sufficient pain killers to try to control pain in that way in actual fact might well quite conceivably kill her.

A It may be a suitable short term, under a very controlled environment, solution but not long term.

Q and I take it one of the effects of that or one of the necessities of that is probably pretty much giving up on trying to treat her as a normal child as far as feeding her goes. That - - if you were going to use that kind of pain management you'd pretty well have to feed her by means of tubes or something.

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A May have to, yes.

Q The - - now, I guess, we can infer thing but I Guess I'd really appreciate sort of some fairly conclusive opinions on these. Would you ever have expected Tracy's ability to, for instance, speak, would ever, develop?

A Given the severity of the disease, no.

Q Would you expect her to ever have any control over her limbs so that she could move them in a meaningful manner such that she might be able to sit up on her own, that kind of thing, as opposed to being propped up? Was that a likelihood?

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A Highly unlikely. Tracy was totally dependent in all aspects of care from feeding to diapering to getting sat up in a chair. With answer to your first question about communications I should say that there have been some children, though not as

720 severely affected as Tracy, that have the ability
to understand but not vocalize and some of them
have been given a computer to talk with and have
gained the ability to communicate that way.

Whether Tracy would have had that ability or not, I
cannot answer that. I suspect, given the seizure
activity that she had, it is an indication that her
brain damage was severe.

Q Dealing with children as severely affected by
cerebral palsy at birth as Tracy was, how many of
them would you expect to have been alive say by - -
730 by the age that - - that Tracy was? How many would
you expect to still be alive at her age?

A The - - best way I can answer that is by
referring to a study that came out of the **Mayo**
Clinic in Rochester where they looked at the
survival of children with cerebral palsy and
when they specifically looked at the totally
involved child, total body involvement, about 50
per cent of them had died or 50 per cent of them
had survived to their tenth birthday.

740 Q Just looking ahead to the future for Tracy, if - -
if we looked at the options that were presented to
you at the time I understand - -

A Which - - which time?

Q On October the 12th.

A Okay.

Q I take it that **without actually opening her up, you weren't in a position to know exactly what you were going to do.** Is that right?

A That's correct.

750 Q Okay. What was - -

A Opening up her hip joint.

Q Yes. What was the most likely type of surgery that was going to be performed on her hip joint?

A Given the- - the changes that we could see on the x-ray with the flattening part of the ball, I suspect that the capsule, the lining of the joint, because of the constant motion and spasticity of her muscles probably had worn away the articular cartilage and we are now talking about a salvage procedure which in simple terms means taking away
760 the damaged part and covering the end of the bone with muscles and hoping that would be enough to take away the painful part of her hip joint.

Q So in terms that I can understand, I take it you're talking about **sawing off the ball part** of the - -

A Actually, more than the ball part. The ball part and **about the top quarter of the - - femur bone.**
the thigh bone.

Q The - - so as far as improving, certainly there's

770 no suggestion that that leg's being worked on in any way that it's going to be used in the conventional sense for - -

A Correct.

Q The - - when discussing the type of medical interventions that were your options at that stage, what kind of effect was this having on - - that you could observe - - on Tracy's mom Laura when you were discussing the options? How was she - -

A We - -

780 Q - - appearing to react to this?

A We had been leading up to - - to this point basically for years suggesting that there would be hip surgery but most of the time we were talking about a reconstructive procedure to put the hip in place and **this was the first time that I suggested that maybe this hip was now too far gone**, that if we got in there and found that the - - the head, the ball part, was totally eroded that it would only cause more pain to put it in, back in joint. This
790 - - this was upsetting to her.

Q Now, as I understand it, your ability to even examine the child perhaps the way you might like to on the day was - - was hampered by the difficulty in say flexing or moving the child's

limbs because of the pain the child was in.

800 A Examining children with cerebral palsy is difficult at any time because we take them into a very artificial situation, we put them on a - - from their chair onto a cold examining table. They will often get more spastic just because of the strange environment and then we come in and try to move them and they, in normal situations without pain, become even difficult to examine. Tracy was exceedingly difficult to examine because of her pain.

Q **The day after the surgery, would that be the end of Tracy's pain?**

A The day after?

Q If - - if the surgery had taken place in November.

810 A **No, the post operative pain can be incredible, difficult to manage for the same reasons we've talked about before.** We do have ways and means of putting what we call epidural catheters where we freeze the bottom half of their body for a period of time but that is only good while they're in the hospital. The children still have to go somewhere, either home or to another institution to recover and **that is not the end of the pain.**

820 Q We've heard that - - that the child was still at a very low body weight after the previous surgery a

year earlier. What kind of a recovery period might be expected for this hip surgery?

A At least the same amount, a good year.

Q And - -

A And maybe even longer.

Q And does this then cure Tracy's pain for the future?

830 A Cure is a difficult word to use when you're dealing with cerebral palsy. There's no cure for cerebral palsy. We're treating symptoms only so we have - - we may have alleviated some of the symptoms in her right hip but it's still not a normal hip so, therefore, it's still at risk for causing trouble of different sorts down the road plus I cannot honestly tell you what was going to happen to her right hip down the road either, or pardon me, to her left hip down the road.

Q Okay. So you're treating symptoms to try and manage pain medically.

840 A I'm treating symptoms to try to keep her sitting as long as possible and to keep her quality of life as best it can be.

Q The - - it's really important to bring out what's the effect of not being able to keep it so that the child can be positioned upright for parts of the day? What - - what's the effect of not being

able to do that?

850 A I.e. if we had not did her scoliosis surgery the
year before. With time the curves that are as big
as Tracy's relentlessly progress even as adults and
some of them get more that 100 degrees. It becomes
impossible to sit for any prolonged length of time.
You end up making custom made chairs to fit the
body in the deformed shape that the body is in and
even that doesn't always work to keep the child
upright. When they're no longer upright you're
talking about positioning in bed. Positioning in
bed has its problems with bed sores, trouble
860 clearing the chest cavity, recurrent pneumonias,
respiratory tract infections. There is problems
with feeding somebody when they're lying down, they
can't swallow and Tracy had difficulty swallowing
already. There is problems with the pain from the
curve itself and pressure from the ribs on the
pelvis. There's problems with pressure sore and
personal hygiene, taking care of these children and
young adults.

870 Q Just when we're talking about degrees of - - so I
make sure I'm clear on this, you spoke about 73
degrees so in other words rather that the back
being straight up and down, it would be as though

one was tipped perpendicular to the ground
sideways.

A That would be close to 100. 90 to 100 degrees
would tip you sideways so 70 degrees is when you're
looking from front to back or back to front,
literally C shaped.

Q So we're talking a curve to the side rather than - -

A Correct.

880 Q - - being hunched over.

A And that's curved to the side, goes right down to
the pelvis to tilt - - tilt the pelvis.

Q The - - in - - in looking, if I can just close at
this point, in looking at the - - the care or the
treatment that Tracy had been given, how would you
describe the manner in which her parents had cared
for her through her lifetime based on what you
could observe?

890 A I had no concerns about the way Tracy was being
cared for. I - - I think she came from a very
caring, loving environment that looked out for
Tracy.

Q Did you ever perceive that they had anything but
her best interests at heart?

A No.

MR. BRAYFORD:

Thank you very much, Dr.

Dzus.