The following text is a translation from a media report in Canada from September 2014, about the SpineCor Brace:

Transcribed from "Reportages : Corset Sous Enquête." *Ici Radio-Canada*. La Facture, 23 Sept. 2014. Web. 13 Oct. 2014.

In Canada, there are more than a million people with scoliosis, a curvature of the spine which starts in childhood. In the mid 90's, a leading orthopedic surgeon from the Sainte-Justine hospital invented a treatment presented as very promising. But today, many parents feel like they have been cheated by the doctor and not adequately protected by the hospital.

Selena Maude's mother: She didn't have a choice, she had to do it, we had to buy it. They believed they were in the best hospital.

Daphnée's mother: We trusted him blindly he looked so convinced his brace was extraordinary.

They were received by a couple of doctors obsessed by their invention: the SpineCor.

Dr. Yves Robert: The first question I ask myself is what was the supervision level in this hospital?

This brace, Selena-Maude Voyer wore it for more than a year. She suffers from scoliosis, a curvature of the spine which affects up to 3% of the population. On their first visit at the Sainte-Justine Hospital, Selena-Maude and her mother, Brigitte Baulieu were received by the orthopedic surgeon Charles-Hamelin Rivard.

Selena Maude: According to him the SpineCor was the only way to avoid surgery. This flexible brace named SpineCor was created more than 20 years ago by Dr. Rivard and his colleague Christine Coillard. It is made of strips of fabric and is an alternative to a rigid brace. During the consultation, Dr. Rivard convinced mother and daughter to pay \$3500 for his brace.

Selena Maude's mother: It seemed like we did not have a choice, we had to get a SpineCor.

Selena Maude: He said "Yes, there is another brace, but you won't tolerate it, it is rigid, very difficult to live with and SpineCor is a lot better."

During the time, Selena Maude was wearing the SpineCor, we saw on her x-rays that a second curve had appeared.

Selena-Maude: It made my back even worse because my first curve was bigger and I now had a second one, a new one.

It is hard to establish a cause and effect relationship, but another patient, Daphnée had been wearing the SpineCor for a year when her parents Annie Bienvenue and Serge Cameron started to be concerned.

Daphnée's mother: We could see before our very eyes that the scoliosis was getting worse. Daphnée grew very quickly, so the brace got too small and she started to have discomfort and red marks, especially in the neck. When we talked about this issue with Dr. Coillard she said "No no, this is normal, I cannot do anything about it."

The couple of inventors, with other researchers, published a number of studies through the years proving the SpineCor's effectiveness. But, opinions about this flexible brace are controversial.

Did the curve improve during the SpineCor treatment?

Daphnée's parents: No, it just got bigger, a lot bigger, more than a few degrees. Her parents are going to see they are not the only ones to have doubts, Dr. Rivard's own colleagues ceased prescribing the SpineCor.

Dr. Marc Girard, director of Medical Affairs agreed to meet us.

Dr. Marc Girard: At the beginning, a few other orthopedists were prescribing the flexible brace but rapidly, they changed for the rigid brace.

Why?

Dr. Marc Girard: They considered it was more efficient than the SpineCor.

After having tried it, Sainte-Justine's orthopedists concluded the SpineCor did not keep its promises.

MG: Time has shown the SpineCor did not meet expectations, it is even deceiving to the expected results.

Daphnée's mother: How is it possible that believing we had the best treatment for our daughter, and none of the other doctors were prescribing this treatment? Why? And then we heard it's because the treatment isn't good! But why didn't anyone say something? They saw us in the hallway with the brace, but no one ever said anything!

Even with the rigid brace, doubts existed for a long time. Those doubts were dispelled in 2013 when a vast independent study confirmed the rigid brace efficacy.

MG: In the mid 2000s it was impossible to tell which of the two braces was more effective as they were both controversial. But today, in 2014, if you ask me, I would never advise anyone the SpineCor: this flexible brace is not an option anymore.

Via Skype, we called Dr Rivard and his wife who now live in France. They did not appreciate the words of the Director of Medical Affairs.

Dr Rivard: Dr Marc Girard is a pediatrician, he doesn't know anything about orthopedic. That's enough.

Why do you say that?

Dr Rivard: Because we proved the SpineCor worked. We published it. Our studies are ten times bigger than the other ones but people are still saying they would not recommend SpineCor to anyone. What right do those people have to say that? They are taking away from children a brace which is proven through the world to be efficient. And they have been doing this for fifteen years, it's enough, good night!

Where is he going?

(Rivard walk off)

Too bad he left because we would have like to talk about the conflict of interest he had as shareholder of SpineCor. With one hand he was prescribing his brace, with the other he was selling it \$3500 through his company, Spimolyx Inc.

Did he tell you he was the owner of Spimolyx?

Daphnée's parents: No

Did he tell you he had stocks in the Spinecor company?

Daphnée's parents: No

Interviewer to Dr. Rivard's wife: Shouldn't you have told the patient?

Dr. Rivard's wife (Christine Coillard): Those who asked the question, had the answer. And people who didn't ask?

Christine Coillard: Well, if they don't ask you... You know you have other things on your mind when you take care of a patient than opening a huge umbrella to protect you from I don't know what. All you have in mind is to do your best to make the patient feel better.

MG: This issue raised our concerns about SpineCor even more because it created the malaise you addressed.

"Le College des Medecins" has the same malaise. The secretary of the college, Dr. Yves Robert says a doctor must always discuss his conflict of interest. Dr. Yves Robert: If he doesn't discuss it, he commits a fault and even if he does discuss it, it does not solve all the issues because the conflict of interest remains present. The problem is not to discuss it or not to discuss it, it is the presence of the conflict of interest.

Daphnée's mother: I believe it should illegal. What he did was he made a sale of a treatment, a brace, at his own benefit. There is an obvious conflict of interest. In fact, it is illegal. According to the investigation of "Le College des Medecins" under the Medical Law, Dr. Rivard was not allowed to make the direct sale of his brace.

Didn't he have to be the doctor before being the seller?

MG: He should always be the doctor and never the seller.

Was he?

MG: I have to agree that when we evaluated his file he wasn't and this is why he doesn't work at the Sainte-Justine's hospital anymore.

Daphnée's father: I am still shocked and outraged, we are talking about Sainte-Justine, a world famous hospital whose purpose is to treat ill children.

MG: What I hope, and what Sainte-Justine hopes is that all treatments which are sold be validated scientifically. This is the goal we are trying to achieve and it is why SpineCor isn't one of the treatments we offer anymore because we did not want to be linked to a treatment proven to be non-effective.

Dr. Rivard lost his right to practice medicine at the Sainte-Justine's Hospital in 2012 leaving behind 900 patients.

Video 2:

Sainte-Justine is more than a hospital, it is a guarantee, a guarantee that the children who are treated are the institution's top priority. But what does the hospital answer to the parents who says the hospital did not manage this doctor properly?

The surgeon, Charlanet Rivard had a long career at Sainte-Justine, he was even Head of the Orthopedic Department, but with the SpineCor, the hospital directors started to doubt his capacities. Therefore, they analyzed Dr. Rivard's patient's files, which were full of surprises.

MG: There were enough cases to realize that something wrong was happening. According to the "College des Medecins" Dr. Rivard was biased in his patient diagnostic. When we look at his behavior, the only explanation possible is he was trying to promote the use of the SpineCor.

Since Dr. Rivard left the video conference, Christine Coillard answered for her husband. According to her the SpineCor was used more often only because the children refused a rigid brace.

Christine Coillard: The children were refusing the rigid brace, the surgery or even sometimes both. So what did you want us to do? Do nothing?

Dr. Marc Girard goes even further saying that some of Dr. Rivard's patients were treated with the SpineCor for nothing.

MG: Some patients were treated with the Spinecor when they either needed another treatment or just did not need any treatment.

As we can read on this letter, Sainte-Justine Hospital took drastic measures by suspending Dr. Rivard's right to practice at Sainte-Justine. Confronted with this decision Dr. Rivard tendered his resignation.

Christine Coillard: I didn't want to be in a fight. My husband couldn't take it anymore so we decided retirement was the best solution.

Selena Maude's mother:-At one point, I received a call from Dr. Coillard telling me the clinic was closing because of serious issues where lawyers were involved. She then suggested I call Dr. Rivard and confer with him.

Daphnée's mother: Dr Coillard said she could send me a list of chiropractors to pursue Dapnée's treatment.

Chiropractors?

Daphnée's mother: Yes, a list of chiropractors who knew the SpineCor and could continue Daphnée's treatment. I was surprised, I wanted another doctor at Sainte-Justine not a chiropractor.

Selena Maude's mother: I thought it was suspicious to switch from an orthopedist to a chiropractor.

What do you think of the way Dr. Rivard's patients were recommended from the hospital to see a chiropractor instead of another orthopedist?

MG: We were frustrated and angry because Dr. Rivard and Dr. Coillard were supposed to leave the hospital. We had to confiscate those list and make sure no similar list left

the hospital.

It is here, at Montreal SpineCor clinic that several patients were recommended to go by Dr. Coillard.

Dr. Louise Marcotte, chiropractor and owner of Montreal SpineCor Clinic: They should have the medical Nobel Prize.

Who? Dr. Rivard and Dr. Coillard?

Dr. Louise Marcotte: Yes, both of them. I have seen up to 90% of results where we were able to either stabilize or reduce the curve with the SpineCor.

Unlike Sainte-Justine's orthopedist, she believes in the flexible brace.

Dr. Louis Marcotte: Here we see the x-ray of a girl who wore the SpineCor and had her curve reduced from 21 to 6 degrees. We also notice how much straighter her back is. The SpineCor is now sold in 25 countries but since the Sainte-Justine hospital did not get the same good results Louise Marcotte talks about, the flexible brace is not offered there anymore. Sainte-Justine, in addition to pushing Dr. Rivard toward the exit, reported him to the "College des Médecins". Selena Maude and Daphne's parents also complained to the "College des Medecins".

MG: When you retire from a hospital, you can still practice somewhere else which is why we informed "Le College des Medecins" of our concerns about Dr. Rivard's behavior. Even if the College blamed Dr. Rivard to have defaulted on his obligations, he won't be bothered since he left for France and in consequence is not a member of the College des Medecins anymore. But some questions are left open.

Dr. Yves Robert: The first question I ask myself is what was the level of supervision in this hospital? I believe there is a weakness in the management provided by the institution.

Do you believe you failed in managing Dr. Rivard, a shareholder of SpineCor?

MG: Maybe we should have taken measures faster but unfortunately, the information we had about Dr. Rivard's behavior did not allow us to take any earlier measures. As Director of Medical Affairs, I do not have the power to fire a doctor. I would like to remind you that a doctor is a private company in a hospital.

Daphnée's mother: I believe Dr. Rivard was not supervised at all.

The SpineCor journey at Sainte-Justine ended in disgrace after 20 years.

Christine Coillard: Telling Dr. Rivard, a very sensible person, who treated his patients like his own children, his work was ineffective, breaks his heart. Now people tell him

what he has done isn't worth anything. I feel like this is a bit too much.

But for the parents, the inventors of the Spinecor are to blame as much as the hospital.

Daphnée's mother: They never told us the whole story, they never took responsibilities for not checking the treatment's efficacy.

MG: The patients had treatment, maybe not as effective as they wish but thankfully, there was no major consequence.

The Spinecor is still sold by some Canadian chiropractic clinics. Those professionals continue to believe in the flexible brace efficacy, a belief which isn't shared by Montreal's children orthopedic hospitals: Sainte-Justine and the Shriners.