



Transcript of the video « Are these effects irreversible? »

<https://youtu.be/HyGCaZiTRZI>

Are these effects irreversible?

A dogma is widespread among doctors, in the light of previously taught knowledge, according to which (especially neurological) radiation-related injuries are irreversible. This dogma is false since there have appeared, since more than 10 years ago, new treatments that enable to reduce the consequences.

Dr. Sylvie DELANIAN Oncologist Radiotherapist, St. Louis hospital:

So far, it was considered that the sequel of radiotherapy was a scar, as in surgery, and that any scar was, by definition, irreversible. And here, let me make a personal digression, but I gave myself as objective, twenty years ago, to transform the word 'irreversible' to 'reversible' or at least to try.

This is the reason why I joined researchers at the Atomic Energy Commission to understand the mechanisms - it's called the pathophysiology - and sought to dismantle the mechanisms in the form of several steps, like stair steps, saying and if we move to such place it can become... and there was a result. Of course, we did not convert with a magic wand, but we can get 50, 80, 90% of correct answers, i.e. people who will be transformed in their lives with a reduction in the aftermath. I think of necrosis in the mouth after ORL cancer. Properly treat this necrosis which disappears in 3 to 6 months instead of staying forever, it is interesting. And there are other examples. There are treatments that have been proven recently. I have the pleasure of leading the unit that I've developed at the Saint-Louis hospital and there are others which are in progress and there are very few centers who are interested, but there are some, which would require perhaps some assistance, infrastructure and personnel to go faster.

Dr. Pierre-François PRADAT Neurologist, La Pitié-Salpêtrière hospital:

We know that dogma spread, even among doctors, this dogma "nerve damage following radiotherapy are irreversible, this dogma is wrong. We have known for long that the neurons, particularly in the nervous system peripheral in the central nervous system is complicated, but neurons have an intrinsic ability to regenerate. In practice, in fact, we're working very transverse from experimentation to therapeutic or diagnostic applications in humans. I can quote a number of works. One of the challenges is to detect early complications of radiotherapy. And so far, this isn't the case. In fact, the diagnosis is often late, and unfortunately, patients follow a long medical journey with multiple consultations until "complication of radiation therapy" is finally diagnosed. And it's a real loss of opportunity for patients, as now, we are moving toward treatments that are protective treatments that are more likely to work and that the disease will be taken early.