



In memoriam

Tribute to Yves Cotrel (1925–2019)



Yves Cotrel was and will remain someone exceptional.

Exceptional in orthopedics, where his name will be lastingly associated with the spine, that essential organ in human beings.

Exceptional for his ingenuity, inventiveness and ceaseless determination to come to the help of patients and their families, always in search of a rational and practical approach to pathologies and their treatment. His patients remained grateful to him all his life long.

Exceptional for the Faith that lived in him and which he felt guiding him in transmitting to those he encountered the human values he had inherited, as seen in his commitment to his patients, to his students (who may properly be called his disciples) and to his colleagues the world over.

Exceptional also because, alongside his wife Marie Lou, so attractive in her personality, at the head of an extensive family, he

consistently embodied and defended the importance of the family solidarity that he always encouraged, so that all family members were, and remain, actively involved in his work.

Exceptional, finally, in that spirit of organization and of the widest possible communication, which was for him an absolute priority.

He liked to point out that, if his own path in life had been so tortuous, it should be borne in mind that the word for that in Greek is “skoliose”, so that in point of fact it was really only to be expected!

We should remember that in medicine he trained to be an obstetrician and that it was pure chance that took him to the Calot Institute in Berck where he spent all of his “first professional life”, as he once put it to me. That was where he discovered the world of spinal deformities and, with a 6-month grant to travel to the States at the beginning of his career, visited all those American colleagues involved in such pathologies, forging enduring friendships.

On his return from America, his inventiveness set to work. Nocturnal vertebral traction, a modification of the Abbott frame that resulted in the Calot frame, more often known as the Cotrel frame, and the development of the EDF (Elongation, Derotation, Flexion) cast. His spirit of independence and control led him to entrust production to a small manufacturer near to Berck itself.

Similarly, once he had learned the principles of the posterior approach to spinal deformity from his teacher Jean Cauchoix, he invented implants that, following external traction to straighten the scoliotic curvature, would fix the concave autologous tibial graft, and the DTT transverse fixation system, which was rapidly adapted for the Harrington instrumentation that was then being developed.

Yves Cotrel’s industrial genius was emerging, and he began filing patents.

This became essential to what he called his “second life”, which began when he left the Calot Institute due to serious health problems, which he was fortunately able to overcome.

The inventiveness that was forever bubbling up in him led him, with the support of his good American friends and the efficiency of the faithful company near Berck, to further improve treatment results so that children would no longer need a postoperative cast. This entailed controlled but immediately constructive development of an instrumentation that he called “universal” – to which I personally made a major contribution in defining strategies and applications, from the outset, between December 1982 and January 1983, for children and adolescents, then, in September 1983, with Michel Guillaumat, for adults.

Yves Cotrel had confidence in us, and it was altogether mutual.

This instrumentation and the associated strategies truly revolutionized scoliosis surgery in particular and spinal surgery in general. Many present-day instruments are more or less derived from it.

Yves gave the perfect demonstration of his industrial genius when, with the help of his sons and of Philippe and his friends in particular, each highly skilled in their own field, he set up the Sofamor company in 1984, which was to be the basis for the development of the new instrumentation to which, in a spirit of loyal friendship so typical of him, Yves gave the name “CD”, from the initials of our two surnames. The company quickly grew to a national and very soon international scale, in partnership first with Danek in 1993 then with Medtronic in 1999.

His indefatigable work of explanation, demonstration, direct exchange, worldwide travel and national then international meetings revealed his innate gifts for communication and discussion, with, for example, the GICD International Cotrel Dubousset Group. These meetings and workshops became renowned worldwide, especially as they were accompanied by booklets in which each shared his or her experience for the benefit of all. The CD instrumentation, if misused, could be dangerous, and to his mind a learning curve was mandatory.

Nor should we forget his essential, indeed foundational role in setting up the French GES Group for the Study of Scoliosis, three years after the launch of the Scoliosis Research Society. It was on their return from the 3rd meeting of the SRS that Yves Cotrel and Christian Salanova from Toulouse suggested and created this group, the first meeting of which was, of course, held in the Calot Institute in Berck in 1969, with Yves Cotrel in the chair.

The GES was a crucible for spinal deformity treatments in our country, bringing together surgeons, physiotherapists and orthotists, etc. Its work continues today under the aegis of the French Spine Surgery Society, to the benefit of all.

And what can be said about his decision, in 1999, with the agreement of the whole family, to devote a substantial part of his personal fortune to setting up the Foundation which bears his name, within the Institut de France, exclusively devoted to research into the etiology and pathogenesis of this still mysterious condition known as scoliosis. . . Research scientists from the four corners of the world come together in a climate of mutual trust. . .

Pure altruism!

In that spirit of fraternal friendship, which he handed down to us, we can therefore say:

Our very warmest thanks!

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