

## Where are we? What do we need?

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In this issue of the journal, a paper on “Global perspectives” of ACL surgery is published [1]. Trends and new techniques are interesting and need to highlight and carefully criticised using rigid scientific methods. At the same time, it is important to understand what surgeons are doing in their everyday live. In this paper, more than 200 well-known knee surgeons gave their opinions about the “best available” treatment of primary ACL injury and ACL revision surgery. The important question is whether we are moving forward, or if the old methods are still valid. Some 30 years ago, all ACL surgery was performed using wide-open arthrotomy (incision length often 25–30 cm, often immobilisation and prolonged hospital stay) and the results were in many studies claimed to be good and excellent in the many (even the majority of) patients. So, what has changed? What is new?

We have gone through a lot of changes during these years, and we have seen several topics come and go. Not so many years ago “isometry”, “clock-face” and “all-inside” were most important and they are not any more for several reasons. For instance, the “isometric” ACL is not “anatomic” and today most knee surgeons perform “anatomic ACL reconstruction”. But, is there any strong scientific evidence that anatomic is really better? Is the laxity less and is the function better? And what about the rerupture risk? There is more strain on the “anatomic” ACL and therefore the risk of rerupture might be even greater than if

the ACL reconstruction is performed “non-anatomic”. And what about the important issue on return to sports? We must confess that in spite of more than 10,000 research papers about the ACL that are found in the scientific databases, we still have somewhat limited knowledge about several aspects related to ACL injuries and their treatment, not least functional outcome and return to sports.

In the paper on Global perspectives, it was interesting that more than 50 % of knee surgeons on the panel performed anatomic ACL reconstruction [1]. But, at the same time, it was somewhat surprising that 47 % of them did not. So, transtibial drilling may still be a valid alternative? Yes, probably, at least in the hands of experienced surgeons and it may be claimed that some knees fare well after transtibial drilling and some not. What is that? This is about what we might call “the individualised approach”, i.e. to understand each knee, each injury, and each person that has sustained an ACL injury. This means that we need to understand the anatomy of that particular knee and the requirements of that particular person. How do we do that? And is it scientific, or do we rely on experienced surgeons with a lot of Level V common sense knowledge? And how can we move such information into a sound Level I/II study? Not so easy probably. In other words, there are still many aspects that we need to explore better in new scientific studies and we need to understand better. The individualised approach is probably of great interest.

Another interesting topic in the above-mentioned study is “return to sports” and what does it really mean? Is it return to any sports or to the same level as before the injury? Probably, we all know by now that return to sports is a very complex issue and needs a lot of detailed knowledge and good experience before the high-level sports person is back safely to the same level as before the injury. And, we all know that some never make it, but our

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knowledge about the reasons to this is limited. And, in spite of the fact that most of the surgeons claimed 6 months as the time to return, we now know from several studies that it takes longer, in many cases much longer. More research is definitely needed here, and we need to understand the multiple reasons much better than we do today. Maybe it is also very much individualised.

The graft issue is of interest as well. In a recent report from the Swedish ACL Registry, it was shown that more than 98 % of all primary ACL reconstructions were performed using hamstrings grafts. This is alarming, as new ACL surgeons will not learn to use patellar tendon grafts and will as a consequence be in trouble when performing ACL revision and looking for a secondary graft option. In the panel, a little more than 50 % of the surgeons used hamstrings as their primary graft source and 23 % used patellar tendon graft. This is reasonable, as any experienced ACL surgeon must be able to deal with several

different scenarios, several different injuries and several different knees. In other words, the individualised approach would be very helpful.

What can we learn from this study? Several things. First of all, we need more studies and we need good studies. We know a lot about graft choices and surgical techniques, but we know less about the functional outcome and return to sports. We need to take time to understand the injury mechanism, and we must learn to know our patient. The last is probably the key to success.

## Reference

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