The “P3” Concept
Or
How to Make Secondary Fracture Prevention
Become the Orthotrauma Surgeon’s Baby

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Because of demographic change, we treat patients with fragility fracture on a daily basis. As a matter of fact, we therefore hold the pole position to identify those patients who are eligible for measures of secondary fracture prevention. For more than 20 years, our performance in doing so has received poor ratings.¹ Multifaceted measures did not succeed to create significant change in this until recently. In view of the solid evidence that proves the effectiveness of measures for secondary fracture prevention in general and for specific pharmacotherapy in special,² this situation awaits a change. The following question therefore arises: What has prevented us from following this “call to action” in the past?

The former approach was to add secondary fracture prevention as an additional task to our daily schedule. To make things even worse, the typical setting our residents meet in the emergency department when treating patients with fragility fracture is not adequate at all to address osteoporosis as a chronic disease. Finally, depending on the reimbursement of the national health-care system, there may be no or only minimal financial incentives on the individual health-care providers level in case of initiation of measures for secondary fracture prevention. To summarize, the rationale to change our attitude toward secondary fracture prevention was too little for most of us in the past.

How Can We Convert These Thoughts Into Practice?

Our P3 concept has been formulated to unveil these considerations to our colleagues in routine clinical practice. The 3 “Ps” stand for plates (and prosthesis), pharmacotherapy, and process.

The first “P”: the basis of orthopedic treatment is applied mechanics. This means we are used to the application of hardware tools, be it plates, prosthesis, and nails and screws or be it splints and other fixation devices, in order to achieve stability in a fracture case. This is what the first “P” stands for. We enjoy to participate in the design and development process of new tools ever since. Thus, we significantly contributed to improve outcome of patients with fracture in the past. However, the potential for fundamental innovations in this direction has to be looked upon sort of limited today. Instead, we need to open our angle of view in order to allow for further improvements to happen. We are in the phase to enlarge our hardware playground with 2 more “Ps.”

The second “P” stands for the “Pharmacotherapy”. We are already used to include medication into our portfolio of treatment options: antibiotics in case of an infection or thromboembolic prophylaxis in patients with joint replacement. In parallel to this, osteoporosis medication could be considered in each and every patient with fragility fracture. A defined algorithm could ensure the initiation of osteoporosis basic prophylaxis, such as calcium and vitamin supplementation in every patient with fragility fracture. More complex cases or patients who require workup because of a secondary osteoporosis would be referred in person to a bone specialist. Or alternatively, we may as well acquire the basic know-how in osteology on our own and become specialists in this field. Whatever approach we decide for—we are going to meet the third “P”.

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that stands for the treatment process. The so-called fracture liaison service—FLS was found to be the perfect structure with respect to the administration of osteoporosis medication. There are different models of an FLS which can be adapted to the local situation and to the degree of our own involvement in this. And finally, there is not only tons of material around on this topic but also specific programs that are focused to give you a hand with the implementation of your own FLS. The third “P” may therefore also be taken as a synonym for prevention which is going to be the future of medicine.

To summarize, our P3 concept is meant as motivation to allow for better outcomes in patients with fragility fracture by adopting secondary fracture prevention as an option. We may create the momentum needed to achieve a paradigm shift and to definitively finish the “not my job” mentality.

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