



ENNOVATE® – SOLUTIONS BEYOND FUSION

The Ennovate® platform combines flexible, situation-specific surgical procedures, high stability for long-lasting surgical results, and maximum process efficiency for hospitals and surgeons in only one system.

International study in 95 spine centers: Systemic solutions are the future in spine surgery. The Ennovate® platform as "Best Practice".

In a development process of several years, Aesculap created the Ennovate® platform in collaboration with international spine centers and with the inclusion of all functional divisions in the hospital, thus setting new standards in the field of pedicle screw systems. With the philosophy of one screw, one system, one platform for all processes, the modular Ennovate® platform offers systemic, customized solutions for all indications and techniques, and for all current challenges in the entire OR and hospital workflow.

Related to the specific anatomical design and functional requirements of the spine, it differs fundamentally from any other joint of the human body. The interaction of 23 disc joints plus several conjunctive joints to the skull and pelvis require extraordinary coordination. Every intrinsically or extrinsically triggered change means a disorder of the entire construct, thereby destabilizing the balance of the spine and consequentially the patient. To restore this balance, hundreds of pedicle screw systems were developed over the course of many years. Due to historical, medical and surgical-technical reasons, this development was dedicated to specific indications and access techniques mostly in succession or also parallel in separated steps. Generally, this has led to various implant systems and associated instruments specific for each access and treatment technique as well as for each pathology. Consequently, spine centers still work nowadays usually with 2 to 5 different pedicle screw systems from different manufacturers.

RESULTS FROM AN INTERNATIONAL STUDY DONE IN 95 SPINE CENTERS

The widespread use of diverse heterogeneous systems directly affects clinical processes and above all the workflow in the OR. It influences the duration of the surgery, the safety and the outcome for the patient. An international study conducted in 95 spine centers focused on the possible effects on the workflow in the OR. The disruptive factors named most frequently resulting from the use of several pedicle screw systems were: Missing instruments in the OR, incorrectly sorted instrument trays, the mix up of MIS and OPEN, lack of specific know-how, and the lack of overview of the OR staff regarding the different systems – especially with changing staff.

This had led to confusions or incorrect instrument handling and consequentially influenced the OR process and patient safety. Generally, OR-staff and surgeons criticized an excessive number of instruments and instrument trays in the OR – and linked to this, a possible prolongation of the surgical procedure. In addition, a higher number of different pedicle screw systems is correlated with higher process costs in the hospital.

SIGNIFICANT DEMAND TO CONCENTRATE ON ONLY ONE SYSTEM

The spine centers surveyed reached the consensus that the reduction to only one pedicle screw system with one screw type, uniform functional principles of the instruments as well as a uniform and safe connection between screw and instruments would result in a clear advantage over the current situation with several systems in use. A perfect solution would be one system that covers all the different access and treatment techniques, all spinal areas as well as all pathologies and indications.

THE ENNOVATE® PLATFORM AS MODULAR COMPLETE SOLUTION

The Ennovate® platform is a lot more than just an intelligent combination of

different instruments and implants for spine surgery. The Ennovate® platform philosophy and the fully redeveloped pedicle screw design are tailored to the needs of patients, surgeons and the hospital organization. The two outstanding features of the pedicle screw: PolyLock® and PentaCore® ensure maximum intraoperative flexibility and control as well as long-term stability. PolyLock® combines the advantages of polyaxial and monoaxial screws in only one screw. At any timepoint during the surgery, the polyaxial screw can be "monoaxialized" and un-locked in any required angle, if necessary several times.

When anchoring the screw in the spongiosa, the unique PentaCore® design ensures above-average biomechanical performance. Especially important is the possibility for a customized implant and instrument configuration, tailor-made for each individual surgeon. If needed, more instruments or modules can be additionally booked to the stationary consigned or loan system. The Ennovate® platform stands for a complete re-thinking away from individual parts and towards one single requirement-oriented system of continuously optimized processes.

What impact does the reduction to one pedicle screw system have on the hospital?

