**Spine Reunion**

**August 13th**

1. **Spinal parameters**

Lack of compensation can be a red flag

New parameters are usually not big discoveries

Jean Dubousset, MD🡪 focuses on spine’s foundation : the pelvis

Alignment refers to + than only spine

Duval-Beaupère : **PI=PT+SS** Always True (Geometrically)

* **PI** not affected by patient’s position, and changes in a patient’s life really rarely. 44 for children and 54 for young adults
* **SS**, affected by the patient’s position/ Extremely rare to have a negative SS. In that case, PT>SS.
* **Small PI 🡪 small SS, large PI 🡪 large SS**
* **PT :** Around 10 to 25

Most numbers are based on young adults; have to be adapted when considering other kinds of patients

Retroversion

Small PI 🡪less compensation / Large PI 🡪 Larger compensation

1. **Spinal Curvature**
2. **PI**

Lordosis useless by itself 🡪 **PI-LL parameter**

**Small PI** 🡪 LL=PI+10

**Average PI**🡪 LL=PI

**Large PI**🡪LL=PI-10

Apex of Lordosis : 4 types

Percentage of implication of vertebras in the PI’s value depends a lot on down vertebrae L4-L5

Lordosis and Kyphosis are deeply correlated in order to have an equilibrium in the body.

High PI 🡪 SPD but compensate for it

Small PI : flat 🡪 more prone to disc

1. **T10-L2 thoraco-lumbar junction**

Average: 0°

Small PI 🡪 Kyphotic / Large PI 🡪 Lordo

EOS Imaging

Cervical lordosis

Protraction/Retraction of the head ≠ cervical kyphosis

What matters from a clinical pov if the alignment in extension 🡪 that’s how to spot the problems.

1. T1Slope and Cervical Alignment

On normative subject: **T1S – XL =17**

ASD Post-Op : horizontal gaz

Improvement to cervical lordosis is the prime parameter for cervical surgery