HMSU   Head-Mounted-Support-Unit

Headrotation as auxiliary.

Device: Digital ancle-reader for mensuring headrotation(horizontal)

Purpose: Shows evident changes of headrotation after manipulation under the feet, which is proofable, because operating through the musclechains and posturesystems.
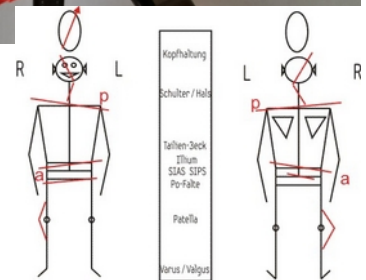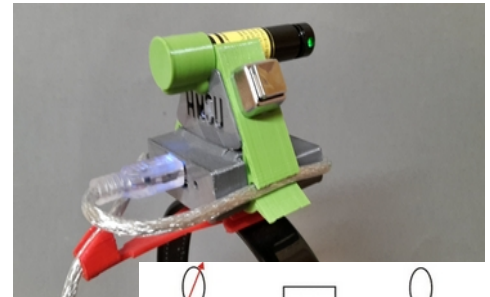
Headrotation, what here means the abillity doing left- and rightturns with the head, is meassured by help of an linelaser and an anclereader(gyroskope).

Therfore can be shown:
➢ Behavior of pedo-cranial, myofascial chains, and with it:
➢ Effects being caused by insoles, shoes, leg-lengthegalisation, bootedge-treatment, optical glasses, okklusion, ...
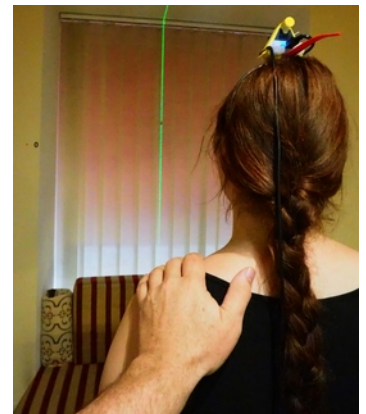
To evaluate headrotation the following is set:
1. Handicaps, blockages and pain, no matter which bodyfloor, gives interferences to normal movement. Within there are effects to headrotation.
2. Manipulations(insoles, shoes, shoetreatment) no matter what kind, make positive, or negative effekts using the postural strukturs(skeleton, joints, muscels, myofascial chains, sensomotoric system,…) from toe to head.
3. So, when manipulation is set, someone will be able to show and proof the changes in statics, when its meassurble in the topjoint(atlas-skull base)

Meassuring:
• The patient is standing on a plane square(Podoskope)
• Now, the posture of head, neck, shouldes, spine, pelvis, legs, knee and feet is fixed to a paper(anamnesis-form / draft)
• Next, the device is set onto the head of the proband and program gets started.
• **CAUSION: Degenerative deseases with the Neck-Spine!(mention before!!)**
  The patient gets the order to fix the green laserline to the middlfront-point ahead from him. **This calibrates the meassuring!**

1. Headrotation, caught in barefoot position.
   This is the **basical mensur,** which returns reference to the following acts.
   ○ For results, the client is told to rotate his head first left as far as possible, than right. Fix the shoulders.
   ○ The head mounted goniometerdevice captures movement and send the data to the computer. Being caught:
     - date, time
     - A°- startingpoint, L°-leftturn, R°-rigtturn
     - added are two more cullums for further notice.
   ○ The program finishes the meassurments by itself.
     The results are shown a)graphic, with an anclegraded disk, and b) numeric in table.
     So, changes and differences are displayed and a quickly and direkt rating/evaluation is possible. The application is easy, quick, and very pricicly,
   ○ The results are comparable as being fixed to an external point!
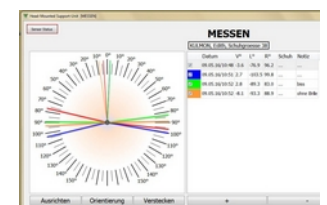

2. Now, this procedure will be repeated, by using traedment.
   > getting higher results, means more turning than „barefoot", we rate as positiv effekts.
   > getting lower results, means less turning, the treadmnet needs to be changed or other points should be considered.
• Mensurings to jawjoints, okklusion, or visus are possible
• In an easy way, its also possible to transver the results to a tableprogram(csv)

The meassurements which are drawn by later control-appointments may easily be used to show the range of treadment, therapieprocess and success-controling.