

# Pilotonderzoek effect Occiflex op HCx

Presentatie 4 oktober 2017

Spine & Joint Centre, Rotterdam

# Uitgangspunten

Sterke relatie van Hoog Cervicale regio met regionale klachten in hoofd en nek

- Lokale nociceptieve pijn
- Referred pain, nek schouder en hoofd  
(in geval van Cervicogene hoofdpijn door convergentie van afferente cervicale nociceptieve pijn op de nucleus Trigemini thv C0/C3)

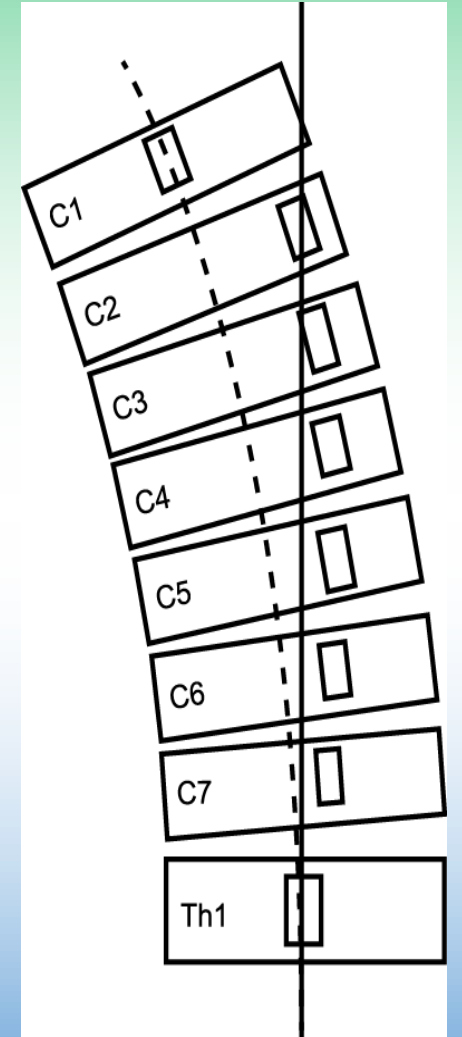
- J.v Zundert 2009

# Koppeling van cervicale beweging:

- Koppeling in hoog cervicale regio heterolateraal:
  - Arthrogeen en musculair
- Koppeling in mid- en laagcervicale regio homolateraal

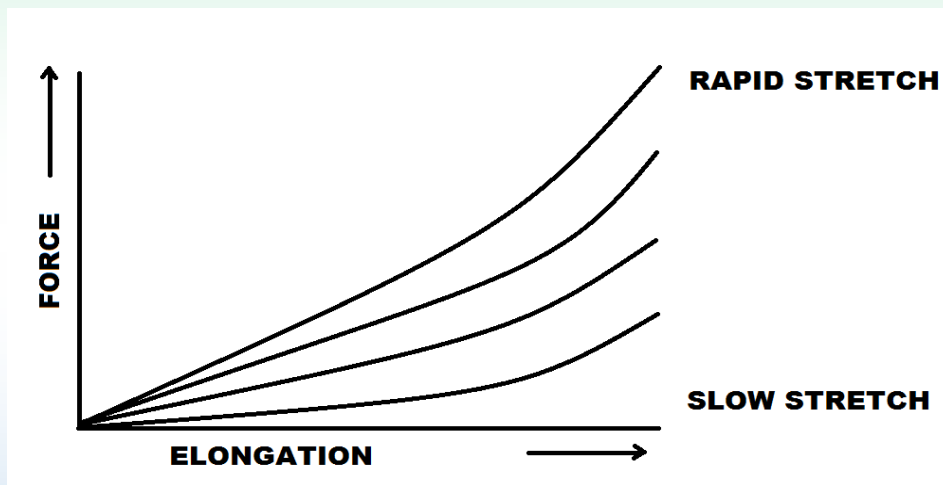


- M.Panjabi, A.White; Clinical Biomechanics of the Spine (1990)



# Visco-elasticiteit collageen weefsel

- Visco-elastische eigenschap van bindweefsel
  - Zeer langzame rekking (bereik Occiflex 0,5 tot 2,5 gr/seconde)



- Provenzano, e. a. (2001). Nonlinear Ligament Viscoelasticity. *Annals of Biomedical Engineering*, vol. 29, 908-914

# Test methode (meet instrument)

- Cervicale Flexie Rotatietest
  - Bij volledige flexie van de CWK is er beiderzijds rotatie mogelijkheid van 45 graden (niveau C1/C2)
- Headset met D-sense

- T.M. Hall, (P.K. 2008;31). *Intertester reliability and diagnostic validity of the cervical flexion-rotation test, Journal Manipulative Physio Therapy., 293-300*



A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
						na behandeling				winst in percentage		winst behandelde kant			
	li in graden	re in grader	in procenten			rotatie li	rotatie re	li	re	li	re		winst onbehandelde kant		
	36	32	80%	71%		42	45	93%	100%	13%	29%	29%	13%		
	34	23	76%	51%		39	35	87%	78%	11%	27%	27%	11%		
	36	25	80%	56%		45	48	100%	107%	20%	51%	51%	20%		
	31	23	69%	51%		32	37	71%	82%	2%	31%	31%	2%		
	26	18	58%	40%		30	32	67%	71%	9%	31%	31%	9%		
	35	49	78%	109%		51	50	113%	111%	36%	2%	36%	2%		
	35	32	78%	71%		43	48	96%	107%	18%	36%	36%	18%		
	43	27	96%	60%		41	37	91%	82%	-4%	22%	22%	-4%		
	31	49	69%	109%		41	49	91%	109%	22%	0%	22%	0%		
	28	26	62%	58%		31	23	69%	51%	7%	-7%	7%	-7%		
	38	27	84%	60%		36	49	80%	109%	-4%	49%	49%	-4%		
	23	17	51%	38%		32	42	71%	93%	20%	56%	56%	20%		
	44	33	98%	73%		41	42	91%	93%	-7%	20%	20%	-7%		
	28	22	62%	49%		32	42	71%	93%	9%	44%	44%	9%		
	33	25	73%	56%		38	41	84%	91%	11%	36%	36%	11%		
	28	25	62%	56%		34	29	76%	64%	13%	9%	9%	13%		
	15	11	33%	24%		24	23	53%	51%	20%	27%	27%	20%		
	28	42	62%	93%		41	36	91%	80%	29%	-13%	29%	-13%		
	13	23	29%	51%		17	20	38%	44%	9%	-7%	9%	-7%		
	35	30	78%	67%		38	35	84%	78%	7%	11%	11%	7%		
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	34	42	76%	93%		51	42	113%	93%	38%	0%	38%	0%		
	28	23	62%	51%		27	33	60%	73%	-2%	22%	22%	-2%		
	41	27	91%	60%		42	42	93%	93%	2%	33%	33%	2%		
	26	23	58%	51%		23	33	51%	73%	-7%	22%	22%	-7%		
	34	15	76%	33%		38	24	84%	53%	9%	20%	20%	9%		
	23	16	51%	36%		29	38	64%	84%	13%	49%	49%	13%		
	23	25	51%	56%		29	23	64%	51%	13%	-4%	13%	-4%		
	27	45	60%	100%		45	46	100%	102%	40%	2%	40%	2%		
	44	32	98%	71%		42	51	93%	113%	-4%	42%	42%	-4%		
	36	25	80%	56%		40	38	89%	84%	9%	29%	29%	9%		
										gemiddelde:		30%	5%		
bdz	24	20	53%	44%		36	25	80%	56%	27%	11%	dubbele behandel richting			
bdz	27	22	60%	49%		42	40	93%	89%	33%	40%	dubbele behandel richting			
bdz	26	20	58%	44%		48	48	107%	107%	49%	62%	dubbele behandel richting			
bdz	32	32	71%	71%		48	48	107%	107%	36%	36%	dubbele behandel richting			
								gemiddelde:		36%	37%				

