

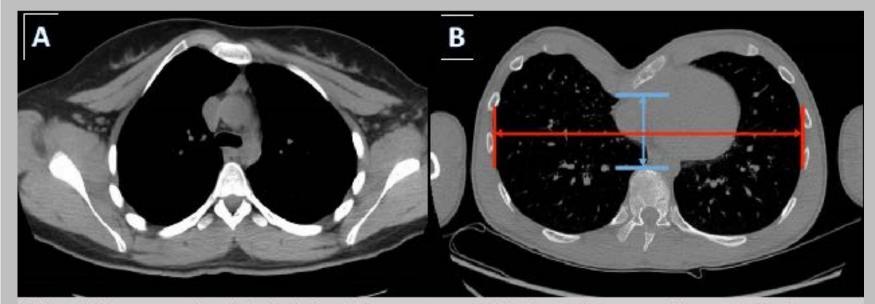
# Pectus Index: a novel marker for the clinical severity of pectus carinatum deformity

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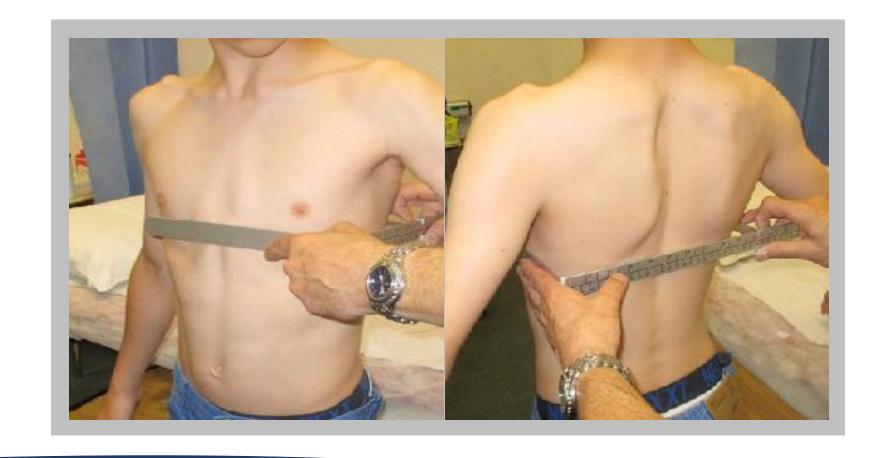
# Radiological Haller



CT image B demonstrating the Haller index: "the measurement of the internal transverse diameter of the thorax on the inside of the rib cage, divided by the shortest anteroposterior depth from the internal aspect of the sternum of the anterior cortex of the nearest vertebral body." 17

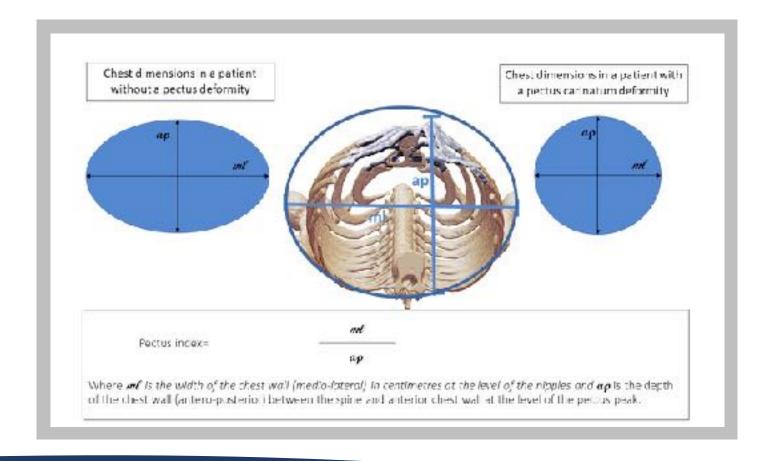


# Technique: physical measurements





# Technique: calculation





# Comparison with clinician's assessment

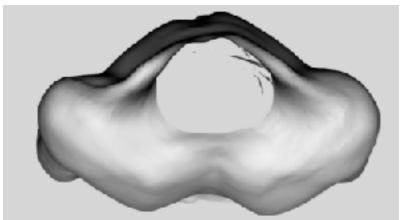


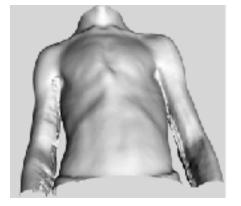


### Development - Use of 3D topographic Scanner

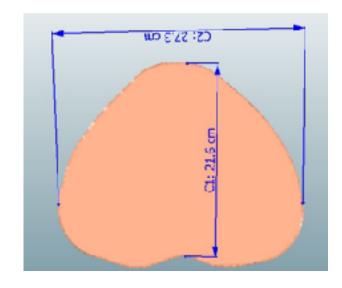


Conventional MRI









Topographic scan using handheld 3D scanner allows precise measurements to be taken



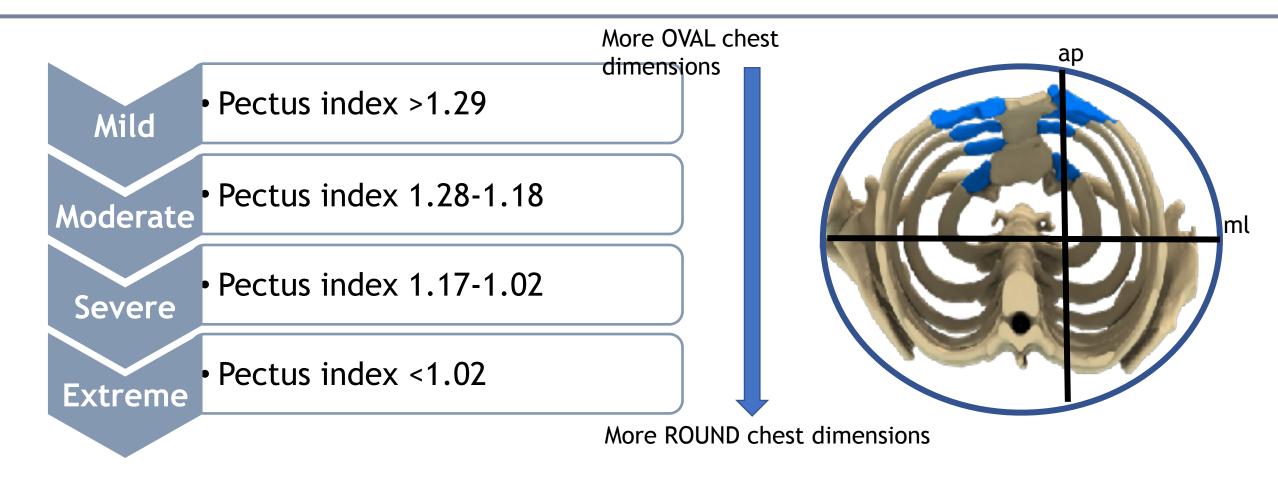
# Statistical analysis with STATA 12.0

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lab		

Clinical Severity	n	Coefficient	Р	95% LCI	95% UCI
Mild	6	1	_	_	_
Moderate	55	-0.104	0.022	-0.192	-0.015
Severe	81	-0.217	0.000	-0.305	-0.130
Extreme	2	-0.265	0.002	-0.434	-0.097



#### **Pectus Index**





### **Applications**



Cheap and easy adjunct to clinical assessment



Objective tool to enable comparison of results



Reproducible result for monitoring of progress with treatment

