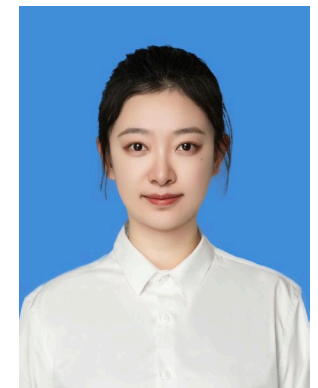


Visceral Obesity and Lipid Profile in Chinese Adults with Normal and High Body Mass Index

Estimated factors	Odds ratio	95% confidence interval	P
Men (n=290)			
Age (≥ 50 vs. < 50 years)	1.62	0.93-2.81	0.09
BSA (>1.72 vs. ≤ 1.72 m ²)	1.64	0.94-2.87	0.08
BMI (>22.5 vs. ≤ 22.5 kg/m ²)	4.41	2.52-7.69	<0.001
Women (n=319)			
Age (≥ 50 vs. < 50 Years)	5.43	2.82-10.5	<0.001
BSA (>1.57 vs. ≤ 1.57 m ²)	2.41	1.23-4.71	0.07
BMI (>22.3 vs. ≤ 22.3 kg/m ²)	5.18	2.71-9.89	<0.001

- The area of visceral fat is associated with metabolic disease, but the method of measurement needs to go through CT scan and professional evaluation.

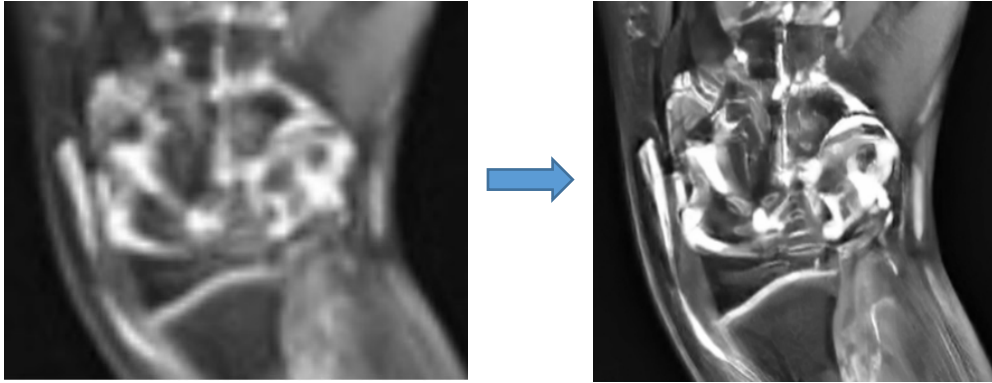
- Our goal is to find some indicators that people can measure themselves to evaluate the risk of excessive visceral fat.
- Visceral obesity was existed in the person with normal BMI, and was associated with adverse lipid profile. Risk factors for visceral obesity in this sub-population were **age ≥ 50 years** or **BMI ≥ 22.3 kg/m²** in women, and **BMI ≥ 22.5 kg/m²** in men.



Yutong Lu

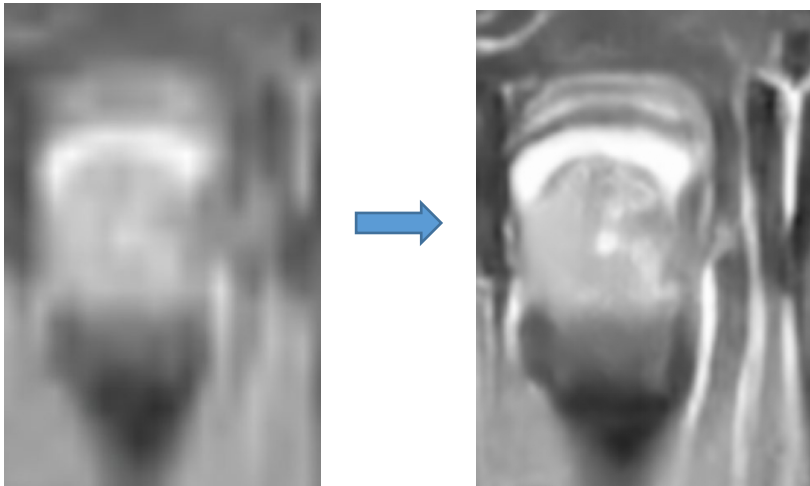
AI approach to improving the quality of MR images of small joints in juvenile idiopathic arthritis (JIA)

Figure 1. Original image VS high resolution image.



Contrast-enhanced whole-body MRI image of the wrist joints of right hand.

Figure 2. Original image VS high resolution image.



Contrast-enhanced whole-body MRI image of the 3rd MCP joints of a 9-year-old female's left hand.

- Whole-body contrast-enhanced MRI can scan the joints of the whole body of the juvenile idiopathic arthritis patients within 30 minutes, but the imaging quality of the small joints is not very satisfactory.
- We have successfully improved the imaging quality of facet joints through artificial intelligence.
- The synovitis scoring using high-resolution images was highly consistent compared to the original images, demonstrating the feasibility and reliability of high-resolution images.



Yutong Lu