

Is the combination of high-joint impact sport and occupational load associated with hip-related symptoms and hip joint structure?

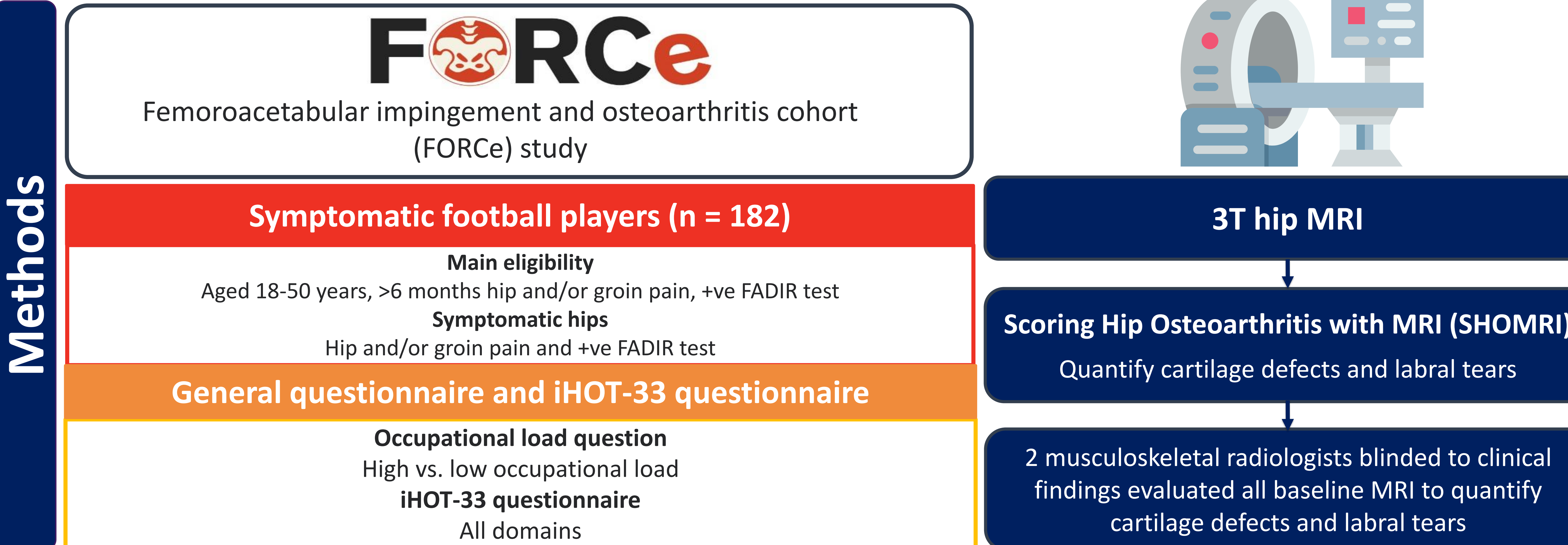
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! High impact sport and occupational load are independent risk factors for hip osteoarthritis development. It is unclear if individuals exposed to both of these loads have worse hip-related symptoms and joint structure.

? The influence of occupational load on hip-related symptoms and joint structure is unknown.

- Aims**
- Evaluate the association between occupational load and hip-related groin symptoms
 - Analyse associations between occupational load and hip joint structure on MRI



Data analysis: regression models (incorporating sex-specific interaction terms) adjusted for age

182 symptomatic football players completed baseline questionnaires, X-rays and MRIs

286 hips total

High vs. low occupational load & iHOT-33 subscales (symptoms, sport, job, social)

20% females

Results

Occupational load (high vs. low) & iHOT33-scores

	aMD	aMD	aMD	aMD
	♂ = -8.4 (-15.1, -1.7) ♀ = 4.6 (-9.3, 18.5)	♂ = -11.1 (-19.3, -2.9) ♀ = 8.0 (-9.0, 24.9)	♂ = -20.2 (-28.3, -12.1) ♀ = 12.0 (-4.7, 28.6)	♂ = -12.2 (-20.2, -4.1) ♀ = 6.8 (-9.8, 23.5)
iHOT-symptoms		iHOT-sport	iHOT-job	iHOT-social

Male football players with high occupational load experience worse hip-related symptoms, function (sport and job) and social concerns.

Occupational load (high vs. low) & hip joint structure

	Incidence rate ratio (IRR)
Cartilage	1.30 (0.9, 1.8)
Labrum	1.07 (0.9, 1.4)

Structural joint changes did not differ between football players with high and low occupational load.

Conclusion

- Males with high occupational load had worse iHOT33-subscale scores compared to footballers with low occupational load
 - No association between occupational load and iHOT-33 in female football players
 - Joint structure did not differ between football players with high & low occupational load
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