







### The Oxford-Aspetar-La Trobe Young Athlete's Hip Webinar Series

### The Young Athlete's Hip Research (YAHiR) Collaboration

Protecting the young athlete's hip: the frontline of clinical practice and research on primary cam morphology and femoroacetabular impingement (FAI) syndrome

### #OxfordHip2021

Date	Title and faculty	CPD
ooth		17.5
20 <sup>th</sup> Nov 2020, 5pm GMT	1. What is primary cam morphology? Taxonomy, terminology and definitions Clare Ardern, Paul Dijkstra, Siôn Glyn-Jones, Karim Khan	1
11 <sup>th</sup> Dec 2020, 6pm GMT	2. Imaging strategies for primary cam morphology and FAI syndrome Paul Dijkstra, Ara Kassarjian, Joanne Kemp, Andrea Mosler, Eugene McNally, Antony Palmer with Bruce Forster and Scott Fernquest	1.5
15 <sup>th</sup> Jan 2021, 7pm GMT	3. What causes primary cam morphology and FAI syndrome? Clare Ardern, Joanne Kemp, Paul Dijkstra, Rintje Agricola, Siôn Glyn-Jones, Josh Heerey, Pim van Klij	1.5
5 <sup>th</sup> Feb 2021, 7pm GMT	4. Screening and prevention of primary cam morphology and its consequences in athletes Clare Ardern, Joanne Kemp, Paul Dijkstra, Rintje Agricola, Andrea Mosler, Jason Oke	1.5
26 <sup>th</sup> Feb 2021, 7pm GMT	5. Hip dysplasia, cam morphology and FAI syndrome – is there a link?  Julie Jacobsen, Inger Mechlenburg, Siôn Glyn-Jones, Clare Ardern, Joanne Kemp, Paul Dijkstra	1.5
26 <sup>th</sup> March 2021, 7pm GMT	<b>6. What are the consequences of primary cam morphology?</b> Andrea Mosler, Josh Heerey, Siôn Glyn-Jones, Rintje Agricola, Clare Ardern, Joanne Kemp, Paul Dijkstra	1.5
30 <sup>th</sup> April 2021, 7pm BST	7. Treatment and prognosis of primary cam morphology and FAI syndrome in young athletes  Joanne Kemp, Mo Gimpel, Per Hölmich, Siôn Glyn-Jones, Marc Philippon, Clare Ardern, Paul Dijkstra	2
Saturday 29 <sup>th</sup> May 2021, 12.00 BST	8. Young Athlete's Hip Research (YAHiR) collaboration Sean Mc Auliffe, Paul Dijkstra, Femi Ayeni, Scott Fernquest, Antony Palmer, Sheree Bekker, Lauren Pierpoint, Clare Ardern	2
23 <sup>rd</sup> June 2021, 8pm BST	9. Involving patients and the public in developing, performing, and reporting research and education on FAI syndrome and primary cam morphology Amy Price, Dawn Richards, Lindsey Plass, Rich Willy, Andrea Mosler, Clare Ardern, Joanne Kemp, Paul Dijkstra	1.5
22 <sup>nd</sup> Sept 2021, 12pm BST	10. Sharing results of the YAHiR Collaboration's Delphi exercise on primary cam morphology terminology, definitions and imaging outcome measures  Clare Ardern, Paul Dijkstra, Eugene McNally, Siôn Glyn-Jones, Joanne Kemp	1.5
23 <sup>rd</sup> Sept 2021, 12pm BST	11. Young Athlete's Hip Research Collaboration: Prioritising rigorous, inclusive, and evidence-based research on conditions affecting the young person's hip (focussing on primary cam morphology and its consequences in athletes)  Mike Clarke, Andrea Mosler, Stephanie Kliethermes, Trish Greenhalgh, Siôn Glyn-Jones, Karim Khan, Joanne Kemp, Clare Ardern, Paul Dijkstra	2.5

Version: 30 August 2020 (14)











Scientific	Paul Dijkstra (Chair), Siôn Glyn-Jones (Co-Chair), Mike Clarke (Co-Chair), Joanne Kemp (Co-	
Planning &	Chair), Karim Khan, Trisha Greenhalgh, Jason Oke, Clare Ardern, Andrea Mosler, Louise	
Organising	Strickland, Sofie Nelis, Faten Smiley, Sue King, Tiya Muluzi, Matt Brock, Ruth Davis	
Committee		
Scientific	Rintje Agricola, Clare Ardern, Femi Ayeni, Sheree Bekker, Paul Dijkstra, Scott Fernquest,	
Faculty	Bruce Forster, Mo Gimpel, Siôn Glyn-Jones, Trisha Greenhalgh, Josh Heerey, Per Hölmich,	
	Julie Jacobsen, Ara Kassarjian, Joanne Kemp, Stephanie Kliethermes, Sean Mc Auliffe,	
	Eugene McNally, Inger Mechlenburg, Andrea Mosler, Jason Oke, Antony Palmer, Marc	
	Philippon, Lauren Pierpoint, Lindsey Plass, Amy Price, Dawn Richards, Pim van Klij, Rich	
	Willy	
Cost	£75 for all 11 webinars	
CPD	The Royal College of Surgeons of England (17.5 CPD credits)	
Accreditation	http://accreditation.rcseng.ac.uk/Home/InfoAccredited	
Collaborating	A collaborative event between the University of Oxford, Aspetar, Qatar Orthopaedic and	
Institutions	Sports Medicine Hospital, and La Trobe University.	
	Approved by British Journal of Sports Medicine (BJSM) as "Quality International Education"	
	<b>Approved by</b> British Journal of Sports Medicine (BJSM) as "Quality International Education" <b>Endorsed by</b> : CIHR Institute of Musculoskeletal Health and Arthritis (CIHR)	
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### **Overall Objectives**

#### Following this webinar series participants will be able to:

- 1. Discuss terminology and definitions for primary cam morphology and femoroacetabular impingement (FAI) syndrome
- 2. Compare imaging outcome measures in research studies on how primary cam morphology develops, and in clinical practice when treating patients with FAI syndrome
- 3. List the risk factors for primary cam morphology in athletes, and discuss the definition, measurement and reporting of these
- 4. Describe potential benefits and harms of screening for primary cam morphology in athletes, including wise treatment strategies, overdiagnosis and overtreatment
- 5. Describe hip dysplasia and its role in FAI
- 6. Discuss primary cam morphology prognosis, including who is likely to develop FAI syndrome and hip osteoarthritis
- 7. Discuss wise clinical management of asymptomatic athletes with primary cam morphology, and those with FAI syndrome
- 8. Develop a research plan for prospective research on aetiology and prognosis of hip conditions in the young athlete
- 9. Develop a plan for Patient and Public Involvement (PPI) in hip research
- 10. Discuss the role of prospective individual participant data meta-analyses in research on primary cam morphology formation and prognosis









### The Oxford-Aspetar-La Trobe Young Athlete's Hip Webinar Series

WEBINAR 1: What is primary cam morphology? Taxonomy, terminology and definitions (1 hour)

### Faculty: Clare Ardern, Siôn Glyn-Jones, Paul Dijkstra, Karim Khan Objectives

- 1. Discuss the current inconsistent use of terminology and definitions for primary cam morphology
- 2. Describe 3 key elements of concept analysis method
- 3. Discuss why primary cam morphology in the athlete matters

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How do we talk about and define primary cam morphology?		
8 min	Introduction	Paul Dijkstra, Clare Ardern &
		Karim Khan
12 min	Confusing terminology, definitions and outcome measures make it difficult to protect athletes' health	Clare Ardern
12 min	What is primary cam morphology? A concept analysis	Paul Dijkstra
12 min	Why is primary cam morphology important?	Siôn Glyn-Jones
16 min	Discussion: implications for clinical practice and research	All









#### WEBINAR 2: Imaging strategies for primary cam morphology and FAI syndrome (1.5 hours)

Faculty: Clare Ardern, Paul Dijkstra, Ara Kassarjian, Joanne Kemp, Andrea Mosler, Eugene McNally, Antony Palmer with Bruce Forster and Scott Fernquest Objectives

- 1. Choose wisely the appropriate imaging for studies on how primary cam morphology develops, and for managing femororacetabular impingement syndrome in clinical practice
- 2. Describe the factors to consider when planning serial scanning for research in adolescent athletes

	How do we diagnose cam morphology and FAI syndrome?		
5 min	Introduction	Clare Ardern, Joanne Kemp	
		& Paul Dijkstra	
20 min	What are the imaging modalities and standards	Eugene McNally	
	for primary cam morphology and its		
	complications in research and clinical practice?		
20 min	This is how I would do serial hip MRI-scans in	Ara Kassarjian	
	research on how primary cam morphology		
	develops		
20 min	Should the imaging core outcomes for primary	Antony Palmer	
	cam morphology <b>research</b> be different to that		
	used when managing FAI syndrome in clinical		
	practice?		
10 min	A parent's perspective: "Will I allow my athlete-	Andrea Mosler	
	child to participate in a research project		
	involving regular scanning?"		
15 min	Discussion: implications for primary cam	With Bruce Forster and	
	morphology research	Scott Fernquest	









#### WEBINAR 3: What causes primary cam morphology and FAI syndrome? (1.5 hours)

Faculty: Clare Ardern, Joanne Kemp, Paul Dijkstra, Rintje Agricola, Siôn Glyn-Jones, Josh Heerey, Pim van Klij

Objectives

- 1. Describe the possible causes of primary cam morphology
- 2. List the risk factors for primary cam morphology
- 3. Discuss the causes of FAI syndrome

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What causes primary cam morphology & femoroacetabular impingement (FAI) syndrome?		
5 min	Introduction	Clare Ardern, Joanne Kemp
		& Paul Dijkstra
20 min	Do we know yet what causes primary cam	Siôn Glyn-Jones
	morphology in athletes? The role of the femoral	
	capital growth plate	
15 min	Modelling load—what is it about load in sport	Rintje Agricola
	that might cause primary cam morphology?	
15 min	What are the possible risk factors for primary	Pim van Klij
	cam morphology?	
20 min	What causes FAI syndrome?	Josh Heerey
15 min	Panel discussion	All









# WEBINAR 4: Screening and prevention of primary cam morphology and its consequences in athletes (1.5 hours)

### Faculty: Clare Ardern, Joanne Kemp, Paul Dijkstra, Rintje Agricola, Andrea Mosler, Jason Oke

#### Objectives

- 1. Implement wise decisions on screening for primary cam morphology in athletes
- 2. Explain overdiagnosis and overtreatment in the context of primary cam morphology
- 3. Summarise the current evidence for primary cam morphology prevention

3. Sammanse the earrent evidence for primary earn morphology prevention		
Should we screen for cam morphology to prevent FAI syndrome?		
5 min	Introduction	Clare Ardern, Joanne Kemp
		& Paul Dijkstra
20 min	Screening the young and older athlete for cam	Andrea Mosler
	morphology – why, how, who and when?	
20 min	Is overdiagnosis and overtreatment a reasonable	Jason Oke
	concern when screening young athletes for	
	primary cam morphology?	
20 min	Is it possible (yet) to prevent primary cam	Rintje Agricola
	morphology in young athletes?	
25 min	Panel discussion	All









# WEBINAR 5: Hip dysplasia, cam morphology and femoroacetabular impingement (FAI) syndrome – is there a link? (1.5 hours)

Faculty: Julie Jacobsen, Inger Mechlenburg, Siôn Glyn-Jones, Clare Ardern, Joanne Kemp, Paul Dijkstra

Objectives

- 1. Define hip dysplasia
- 2. Explain the role for physiotherapy training in managing hip dysplasia
- 3. Describe the current evidence for dysplasia in femoroacetabular impingement and primary cam morphology
- 4. Develop a management plan for an athlete with hip dysplasia

Is hip dysplasia associated with primary cam morphology and FAI syndrome?			
5 min	Introduction	Clare Ardern, Joanne Kemp &	
		Paul Dijkstra	
20 min	What is hip dysplasia and is there a role for	Julie Jacobsen	
	physiotherapy training in managing the		
	condition?		
20 min	Hip dysplasia, cam morphology and FAI	Inger Mechlenburg	
	syndrome – is there a link?		
20 min	How do we manage hip dysplasia in the athlete?	Siôn Glyn-Jones	
	When is surgery indicated and what types of		
	surgery should we consider?		
25 min	Panel discussion	All	









#### WEBINAR 6: What are the consequences of primary cam morphology? (1.5 hours)

Faculty: Andrea Mosler, Josh Heerey, Siôn Glyn-Jones, Rintje Agricola, Clare Ardern, Joanne Kemp, Paul Dijkstra

#### Objectives

- 1. Explain the possible consequences of primary cam morphology
- 2. Describe the relationship between primary cam morphology, hip pain, and early osteoarthritis
- 3. Discuss primary cam morphology in athletes as a risk factor for hip osteoarthritis
- 4. Design a patient information leaflet to help patients/athletes to understand their risk of developing osteoarthritis associated with different sizes of primary cam morphology

Consequences of primary cam morphology in the athlete		
5 min	Introduction	Clare Ardern, Joanne Kemp
		& Paul Dijkstra
15 min	Will athletes with primary cam morphology	Andrea Mosler
	develop groin pain?	
15 min	What is the relationship between primary cam	Josh Heerey
	morphology, hip pain and early OA?	
15 min	Who will develop osteoarthritis?	Siôn Glyn-Jones
15 min	Can we prevent athletes with large primary cam	Rintje Agricola
	morphologies from developing osteoarthritis?	
25 min	Panel discussion	All









## WEBINAR 7: Treatment and prognosis of primary cam morphology and femoroacetabular impingement in young athletes (2 hours)

### Faculty: Joanne Kemp, Mo Gimpel, Per Hölmich, Siôn Glyn-Jones, Marc Philippon, Clare Ardern, Paul Dijkstra

Objectives

- 1. Construct an effective physiotherapy program for athletes with FAI syndrome and primary cam morphology
- 2. Explain the indications for surgery in athletes with FAI syndrome and primary cam morphology
- 3. Create a wise treatment plan for the athlete with asymptomatic primary cam morphology or FAI syndrome and primary cam morphology
- 4. Summarise the current evidence for physiotherapy vs hip arthroscopy when managing athletes with FAI syndrome

Treatment and Prognosis of primary cam morphology and FAI syndrome in athletes		
5 min	Introduction	Clare Ardern & Paul Dijkstra
20 min	What is best practice physiotherapy for the	Joanne Kemp
	athlete with primary cam morphology and early	
	FAI syndrome?	
20 min	Clinical pearls in managing early primary cam	Mo Gimpel
	morphology – the Southampton Football Club	
	experience	
20 min	What are the indications for surgery for the	Per Hölmich
	athlete with primary cam morphology and early	
	FAI syndrome?	
20 min	Physiotherapy vs hip arthroscopy for athletes	Siôn Glyn-Jones
	with FAI syndrome – current evidence	
20 min	What are the best surgical options for the	Marc Philippon
	athlete with debilitating FAI syndrome?	
15 min	Panel Discussion	All









#### WEBINAR 8: Young Athlete's Hip Research (YAHiR) Collaboration (2 hours)

Faculty: Sean Mc Auliffe, Paul Dijkstra, Femi Ayeni, Antony Palmer, Scott Fernquest, Sheree Bekker, Lauren Pierpoint, Clare Ardern

#### Objectives

- 1. Apply a framework for high quality clinical research
- 2. List the factors contributing to complexity in research
- 3. Discuss the importance of hip research collaboration

3. Discuss the importance of hip research collaboration			
	High quality research and collaboration		
10 min	Introduction	Clare Ardern & Paul Dijkstra	
15 min	What is high quality research? Stakeholder	Sean Mc Auliffe & Paul	
	perspectives on factors contributing to high	Dijkstra	
	quality research on how primary cam		
	morphology develops in athletes - a qualitative		
	interview study		
15 min	Planning collaborative research on primary cam	Femi Ayeni	
	morphology formation – top tips.		
20 min	Lessons from the FAIM study	Antony Palmer & Scott	
		Fernquest	
15 min	Why is clinical research so complex?	Sheree Bekker	
15 min	Why is it important to collaborate and share data	Lauren Pierpoint	
	in hip research?		
30 min	Panel Discussion	All	









# WEBINAR 9: Involving patients and the public in developing, performing, and reporting research and education on FAI syndrome and primary cam morphology (1.5 hours)

# Faculty: Amy Price, Dawn Richards, Lindsey Plass, Rich Willy, Andrea Mosler, Clare Ardern, Joanne Kemp, Paul Dijkstra

#### Objectives

- 1. Describe patient and public involvement (PPI) in planning, performing, and reporting research
- 2. Develop a PPI plan for research on primary cam morphology and FAI syndrome
- 3. Summarise a parent's perspective on the risk of their child developing primary cam morphology in adolescent sport
- 4. Consider the importance of the patient's voice when discussing FAI syndrome treatment options

Patient and public involvement in research and education		
5 min	Introduction	Clare Ardern, Jo Kemp &
		Paul Dijkstra
20 min	Patient and public involvement (PPI) in research	Amy Price and Dawn
	– what is it and why is this so important?	Richards
	Essential components of a plan for PPI in	
	research	
15 min	Thriving with FAI syndrome	Lindsey Plass
15 min	Involving patients in developing patient reported	Rich Willy
	outcome measures in hip research/How can we	
	make research more inclusive?	
5 min	A parent's perspective: my child is a young	Andrea Mosler
	competitive football player at risk of developing	
	primary cam morphology - should I worry?	
30 min	Research and Collaboration Panel Discussion	All with Dawn Richards









# WEBINAR 10: Sharing results of the YAHiR Collaboration's Delphi exercise on primary cam morphology terminology, definitions, and imaging outcome measures (1.5 hours)

### Faculty: Clare Ardern, Paul Dijkstra, Eugene McNally, Siôn Glyn-Jones, Joanne Kemp Objectives

- 1. Apply a standard taxonomy, terminology, and definition for primary cam morphology and femoroacetabular syndrome
- 2. Discuss the consensus on imaging outcomes for studies on how primary cam morphology develops
- 3. Consider the benefits to stakeholders of applying consistent terminology and definitions for primary cam morphology

10 min	Introduction – Delphi study on primary cam	Joanne Kemp, Clare Ardern
	morphology	and Paul Dijkstra
15 min	Consensus definition for primary cam	Paul Dijkstra
	morphology – results of the Delphi study	
15 min	Consensus taxonomy and terminology for	Clare Ardern
	primary cam morphology and femoroacetabular	
	impingement syndrome	
20 min	Consensus on imaging outcomes for studies on	Eugene McNally
	how primary cam morphology develops	
30 min	Research and Collaboration Panel Discussion	All with Siôn Glyn-Jones









WEBINAR 11: Young Athlete's Hip Research Collaboration: Prioritising rigorous, inclusive, and evidence-based research on conditions affecting the young person's hip (focussing on primary cam morphology and its consequences in athletes) (2.5 hours)

Faculty: Mike Clarke, Andrea Mosler, Stephanie Kliethermes, Trisha Greenhalgh, Karim Khan, Siôn Glyn-Jones, Clare Ardern, Joanne Kemp, Paul Dijkstra
Objectives

- 1. Summarise the key elements of study design to investigate how primary cam morphology develops
- 2. Review measures to avoid selection bias in research on how primary cam morphology develops
- 3. Discuss examples of high-quality research on how primary cam morphology develops (focussing on how to define, measure and report risk factors)
- 4. Discuss some of the important questions only qualitative research can answer

10 min	Introduction	Clare Ardern, Joanne Kemp and Paul Dijkstra
15 min	What are the best populations to investigate how primary cam morphology develops? (Including top 5 tips to avoid selection bias)	Andrea Mosler
15 min	What is an Individual Participant Data (IPD) Meta- analysis?	Mike Clarke
20 min	Cohort study planning, conducting and data sharing for future IPD meta-analyses – is it possible?	Stephanie Kliethermes
25 min	We should go beyond numbers and meta- analyses; there are important questions that only qualitative research can answer	Trisha Greenhalgh
5 min	Short break	
20 min	Summary of the Delphi exercise to agree on a prioritised research agenda for conditions affecting the young person's hip	Paul Dijkstra
40 min	Research and Collaboration Panel Discussion	All with Karim Khan and Siôn Glyn-Jones