July 20th – July 27th 2024

WMFC 2024 Conference Proceedings

Brought to you by:
The Australian Organising Committee
Docceroos LTD

Welcome

"We are so pleased to welcome you to the 28th International Symposium of Medicine and Health in Sport and World Medical Football Championships. We seek to continue the tradition of international peer learning across a diverse range of topics within medicine in an ongoing journey for professional development. We also continue to support inclusivity and health in medical practitioners around the world. It is with great joy that Australia and the Sunshine Coast are hosting the first ever Women's World Medical Football Championships.

I would first like to acknowledge the traditional custodians of the lands on which this conference and the Australian WMFC is held the Kabi Kabi Nation and all associated tribes.

We hope that you will find the range of international talks, key-note speakers and the diversity of discipline themes engaging, educational and informative in your future practice. I also wish a competitive World Medical Football Championships to all involved. Finally I hope that everyone has a chance to experience the wonderful place that is the Sunshine Coast."

Dr Jack Gilpin
On behalf of the Australian
Organising Committee

Organising Committee

Dr Alan Jones, Dr Jack Gilpin, Dr Paul Bloomfield, Dr Andrew Teh, Dr Ross Cairns, Dr Christopher Ross, Dr David Ghan

Conference Team

Dr Steven Doherty, Dr Stephen Ong, Dr Jack Gilpin, Dr Paul Bloomfield

Major Event Partners:

Sunshine Coast Council

Sunshine Coast

Grimsey

Major Event Partners

WE WOULD LIKE TO THANK OUR MAJOR EVENT PARTNERS:

GOLD PARTNER:

Event Partners

WE WOULD LIKE TO THANK OUR SILVER EVENT PARTNERS:

MyLocalDoc

skinpatrol
we save lives

dermdirect
doing dermatology differently

mips

Major Event Partners:

Sunshine Coast COUNCIL

Sunshine Coast

Grimsey

Overview of schedule

Saturday July 20th 2024
Opening Dinner 5:30pm Captains Arrival, Players and guests 6pm arrival Finish ~9:30
Sunshine Coast Convention Centre - *Ticket Purchase Required*

Sunday July 21st 2024
Day 1 of WMFC – Maroochydore Football Club
Conference Day 1 – Poster Viewings - At leisure, see digital package

Monday July 22nd 2024
Day 2 of WMFC – Maroochydore Football Club
Conference Day 2 – Theme Trauma and Sports Medicine - Novotel

Tuesday July 23rd 2024
Day 3 of WMFC – Maroochydore Football Club
Conference Day 3 – Theme Medicine and Surgery - Novotel

Wednesday July 24th 2024
Conference Day 4 – Poster Viewings - At leisure, see digital package
Event Activities – e.g. visit to Australia Zoo

Thursday July 25th 2024
Day 4 of WMFC – Maroochydore Football Club
Conference Day 5 – Theme WMFC Conference Discussion and Lifestyle Medicine - Novotel

Friday July 26th 2024
Day 5 of WMFC – Maroochydore Football Club
Conference Day 6 – Theme Health of Women in Sport - Novotel

Saturday July 27th 2024
Day 6 of WMFC Final Matches – Maroochydore Football Club
Closing Dinner and Conference Awards - Sunshine Coast Convention Centre – 6pm arrival till late, seated 2 course dinner * Ticket Purchase Required

Major Event Partners:

Conference Agenda

Conference Day 1 Sunday 21/07/24 – Poster Viewings
At leisure, see digital package

Conference Day 2 Monday 22/07/24 – Theme Trauma and Sports Medicine
Novotel Sunshine Coast

MONDAY JULY 22 – TRAUMA AND SPORTS MEDICINE		
Chair: Rob Redwin and Steve Thackway		
TIME	SPEAKER	NOTES
1530-1550 Incl 3-5mins for questions	C Doherty Physio Aus	**KEYNOTE ADDRESS** Sore Not Stuffed Knee pain in older athletes
1550-1605	Marco Maricevich USA	Facial fractures Related to Soccer
1605-1620	Aisha Mirza Canada	Game changing use of US on the sideline
1620-1635	Stephen Ong Australia	Ocular Trauma in Football
1635-1650	Andreas Stuhn Germany	Risk Screening Sports health Check. Am I healthy for sport?
1650-1705	Roberto Medina USA	Sports hernia (athletic pubalgia)
1705-1720	Jim Holland Australia	The 4R's Framework of Nutritional strategies for post exercise recovery.
1720-1735	Mario Zotti Australia	Is the degree of patient satisfaction and extension strength following isolated lumbar extensor retraining related to lumbar multifidus morphology on MRI and/or other patient variables?
1735-1745	QUESTIONS	
1745-1830	DRINKS IN CONFERENCE RECEPTION AREA - Digital Poster Viewing in Conference Room	

Major Event Partners:

Conference Agenda

Conference Day 3 Tuesday 23/07/24 – Theme Medicine and Surgery
Novotel Sunshine Coast

TUESDAY JULY 23 – MEDICINE AND SURGICAL MIX		
Chair: Stephen Ong and Jim Holland		
1530-1550	Craig Juergens Australia	Should Young Athletes undergo Cardiovascular screening prior to competitive sport
1550-1605	Travis Schroeder Canada	Diagnosis and Management of Inguinal hernias
1605-1620	Sanghoon Lee South Korea	Autoimmune connective tissue and dermatological diseases in children with autism spectrum disorder
1620-1635	Carlos Anciano Venezuela	Minimally Invasive approach to anterior mediastinal mass (teratoma) in the active young patient.
1635-1650	Juan Moral Gamez, Alicia Lucendo-Noriega Spain	Doctor, I was just about to take a corner kick! Patella Dislocation
1650-1705	Vladimir Teplan Czech	Simultaneous robotic resection of colorectal cancer and liver metastases
1705-1720	Michael Nugent Ireland	Ending Pyjama Paralysis; Physical Steps In The Right Direction For An Irish University Hospital
1720-1735	Gabriel Amorim Brazil	Post-concussion syndrome in football: a case report
1735-1745	QUESTIONS	
1745-1830	DRINKS IN CONFERENCE RECEPTION AREA - Digital Poster Viewing in Conference Room	

Conference Agenda

Conference Day 4 Wednesday 24/07/24 – Poster Viewings
At leisure, see digital package

Conference Day 5 Thursday 25/07/24 – Theme WMFC Conference Discussion and Lifestyle Medicine - Novotel Sunshine Coast

THURSDAY JULY 25 – WMFC CONFERENCE AND LIFESTYLE MEDICINE		
Chair: Shiva Roy and Scott Murray		
1530-1550 Includes 10 min for questions	Jack Gilpin Australia	Organising the WMFC
1550-1605	Matthew Do rego Canada	The "high" performance athlete (Drugs in sport)
1605-1620	Mira Backo-Shannon Canada	Physician leadership in the Modern System
1620-1635	Hussain Khimji Canada	Lifestyle Medicine: Definition, Importance and power of Exercise
1635-1650	Max Franke GB	Involvement in organised sport and exercise as a junior doctor in the UK
1650-1705	Jamie Thoroughgood GB	When Can I go back to Yoga?
1705-1720	Suraj Archer USA	40 Winks as Vital as the 40-Yard Dash: The Critical Role of Sleep in Athletic Performance
1720-1735	Aisha Mirza Canada	Dermatological conditions in athletes
1735-1745	Paul Dhillon Canada	Real Wellness: Quantitative & Qualitative Effects on Wellness of a National Sports Program for Physicians
1745-1755	QUESTIONS	
1800-1900	Captains Meeting in Conference Room	

Conference Agenda

Conference Day 6 Friday 26/07/24 – Theme Health of Women in Sport
Novotel Sunshine Coast

FRIDAY JULY 26 – HEALTH OF WOMEN IN SPORT		
Chair: Nick Ingham and Steve Doherty		
1530-1555 Incl 3-5 minutes for questions	Deirdre McGhee Aus Physio	**KEYNOTE ADDRESS** Managing Breast Related Issues in Female Athletes
1555-1620 Incl 3-5 minutes for questions	Rae Dower Technical Director FFA Women Junior Matildas coach	**KEYNOTE ADDRESS** Training and Overtraining in Young Footballers
1620-1645 Incl 3-5 minutes for questions	Melanie Hayman	**KEYNOTE ADDRESS** What health professionals need to know about exercise during pregnancy and postpartum.
1645-1700	Claire Doherty	ACL prevention in women
1700-1715	Joanna Sherriff NZ	Case Presentation of anorexia nervosa in a young football player and endocrine complications
1715-1730	Michaela Thornton	Patella Tendon Load Progression during Rehabilitation Exercises
1730-1740	QUESTIONS	
1740-1830	DRINKS IN CONFERENCE RECEPTION AREA - Digital Poster Viewing in Conference Room	

Digital Posters

Gabriel Amorim	Spondylolysis and RED-S in Adolescent Volleyball Athlete
Gabriel Amorim	Exercise-induced bronchoconstriction: A case series in a swimming team
Juan Montano	Epilepsy and Sport: Literature Review
Lubos Nachtnebl	Long-Term Outcomes of Kinematic Navigation vs. Conventional TKA: A Single Institution Experience
Sudong Park	Influence of Adult Attention-Deficit/Hyperactivity Disorder and Insomnia on Risk of Minor Injury: Prospective Observation Study
Jae Chul Lee	Relieving frozen shoulder pain with acupotomy : A case report
Francisco Sanchez	Stromal Vascular Fraction augmented with Autologous Cartilage Particulate for the treatment of focal cartilage lesions: Surgical technique

Abstracts

AMORIM, Gabriel, França, FKM, Rodrigues Júnior, SJ, Martins, AS, Fuchs, NMC Brazil

Post-concussion syndrome in football: a case report

Introduction

Post-concussion syndrome (PCS) is a condition that can occur after a sports-related concussion. It's characterized by a range of symptoms that persist for weeks, months, or even longer after the initial injury. These symptoms can include headaches, dizziness, fatigue, memory problems, difficulty concentrating, irritability, and mood changes. This case reports a case of a football athlete who has presented symptoms suggestive of post-concussion syndrome for two years.

Case Report

Male, 18 years old, football player, in a pre-season evaluation consultation, reports a history of facial trauma after an elbow blow to the nasal region during sports practice 2 years ago, which caused him symptoms suggestive of concussion for about 2 weeks. However, the athlete reveals that there was no diagnosis or correct management of the concussion at the time and that he continued training and playing with symptoms such as headache and dizziness. He reports having a history of mild headaches, controlled by oral medications and non-restorative sleep, with difficulty initiating and maintaining sleep. During the consultation he reported experiencing a new more severe pattern of headaches, sometimes debilitating, requiring intravenous medication for symptom relief, the athlete noticed that the headaches are triggered by exertion or mild head traumas such as heading in football, and are associated with aura, nausea, and vomiting. He still has a non-restorative sleep pattern and now complains of symptoms suggestive of anxiety. The complete physical examination had no abnormalities, and the electrocardiogram and exercise test also were normal. He underwent a brain MRI, which showed no abnormalities. After ruling out central nervous system conditions, the diagnosis of post-concussion syndrome became more likely.

Conclusion

Diagnosing PCS can sometimes be challenging, as its symptoms can overlap with other conditions. It's essential to rule out other potential causes of symptoms, such as migraines, anxiety disorders, or depression. Imaging tests like CT scans or MRIs are typically normal in PCS, which further complicates diagnosis. A comprehensive evaluation by a healthcare professional experienced in managing concussions is crucial for an accurate diagnosis. Recognizing the symptoms, accurately diagnosing the condition, and implementing appropriate management strategies are crucial steps in promoting recovery and preventing long-term complications. In sports, particularly contact sports like football, concussions are a significant concern. Athletes who experience multiple concussions or develop PCS may face difficult decisions regarding their future participation in sports. In some cases, retirement from the sport may be necessary to prevent further brain injury and long-term consequences. Alternatively, athletes may choose to switch to a less physically demanding sport to reduce their risk of additional concussions.

ANCIANO, Carlos, Allman, R, Navarrete, S, Fernandez, L, Speicher, J, Oliver, A, Iannettoni, M. Venezuala

Minimally Invasive Approach to Anterior Mediastinal Mass in the Active Young Patient: Teratoma with En Bloc Lung Resection and Phrenic Nerve Release in a Child

Minimally invasive thoracoscopic approaches on well selected young patients offer options to minimize surgical trauma and enhance early return to activity. We illustrate with management of a complex large anterior mediastinal mass in a 12yo with pulmonary and phrenic nerve compromise.

ARCHER, Suraj USA

40 Winks as Vital as the 40-Yard Dash: The Critical Role of Sleep in Athletic Performance

The pursuit of peak athletic performance often focuses on training, nutrition, and recovery. However, one crucial factor is often overlooked: sleep. This abstract explores the complex relationship between sleep and athletic performance, highlighting the importance of adequate sleep for optimal physical and cognitive function.

I will delve into the intricate science of sleep, emphasizing the significance of the sleep cycle and its various stages in muscle repair, memory consolidation, and hormone regulation. A growing body of research reveals a direct correlation between sleep duration and athletic performance, as demonstrated by elite athletes like Lionel Messi prioritizing sleep as a cornerstone of their training regimen.

Furthermore, I will examine the impact of circadian rhythms on athletic performance, acknowledging the challenges faced by athletes due to travel, competition schedules, and disrupted routines. I will also address the detrimental effects of sleep deprivation, illustrating how it impairs reaction time, decision-making, and overall athletic prowess to a degree comparable to alcohol intoxication.

The link between sleep deprivation and increased risk of injuries is also explored, highlighting the importance of adequate sleep in maintaining musculoskeletal health and reducing the likelihood of accidents. Additionally, I will discuss the long-term consequences of chronic sleep deprivation, which can lead to decreased longevity and increased susceptibility to chronic diseases.

In conclusion, this abstract underscores the significance of sleep as a powerful weapon in the athlete's arsenal. By prioritizing sleep and understanding its vital role in physical and cognitive performance, athletes can optimize their training, reduce the risk of injuries, and ultimately achieve their full potential on and off the field.

Abstracts

BACKO-SHANNON, Mira **Canada**

Physician Leadership in the Modern System

Physicians have delivered medical care to patients for centuries. Founded in science and delivered as a humanity, the role of physicians in caring for people and in leading the health system has been well paved. With the expanse of health care delivery by various professional groups and a focus on patient-driven care the physician-patient partnership sits in a complex ecosystem. Algorithms, artificial intelligence, operational efficiency data and broadened work across teams have shifted the role of physician as leader. Amidst a health human resource low point, physician burnout rates increasing, and exponential rates of knowledge turnover in medicine, physician leadership is paramount. This talk will explore the transition of the physician role in the modern health care system; one that is using big data and AI technology. It will explore what it means to be a physician leadership today, and how to develop the agile skills needed to lead.

DHILLON, Paul, KAVOOSI, Kaveh **Canada**

REAL WELLNESS: Quantitative & Qualitative Effects on Wellness of a National Sports Program for Physicians

This presentation investigates the impact of participation in a national sports program, specifically the Team Canada Medical Football team, on the wellness of physicians. Through a national survey of physicians who were part of the team, both quantitative and qualitative data were collected to assess the effects on wellness parameters. The study also provides a cursory review of the broader value of sport in physicians' lives, highlighting its potential to enhance joy and decrease burnout. Preliminary findings suggest that involvement in the national sports program positively influences various dimensions of wellness among physicians, offering insights into the potential role of sports in promoting well-being within the medical community.

Abstracts

DO REGO, Matthew, Larsson, J **Canada**

The “High” Performance Athlete

This presentation explores the multifaceted relationship between alcohol, marijuana, and athletic performance through examining evolving trends, and nuanced considerations that may be contributing to increase cannabis use in modern athletes and sports stars.

Beginning with marijuana, an increasingly favored substance used among athletes, we investigate its rising prominence in the sporting world. Athletes are turning to marijuana for potential benefits, including pain management, anxiety reduction, and enhanced recovery. However, this shift raises concerns about neurodevelopmental and cognitive impairment, performance decrements, and uncertainties regarding long-term use. Our presentation encompasses current and potential future studies postulating on the relationship between marijuana and athletic performance, providing insights into evolving perceptions of its benefits and risks.

Shifting the focus to alcohol, we then examine potential reasons behind its waning popularity among athletes. Despite its perceived benefits in stress relief and social bonding, studies suggest potential drawbacks such as impaired muscle recovery, disrupted sleep patterns, and compromised physical well-being. Along the way we pay homage to the 'shoey,' an Australian tradition symbolizing celebration in the sporting realm, all the while including other interesting references and jokes.

Ultimately, we assess the relative benefits of marijuana over alcohol, recognizing athletes' historical use of substances for relaxation and enjoyment while acknowledging the complex interplay between these factors and athletic performance.

Athletes may be confronted with the challenge of choosing or being advised to consume the lesser of two potential performance-inhibiting substances, uncovering a dynamic landscape where relaxation, enjoyment, and athletic excellence intersect in compelling ways.

Abstracts

FRANKE, Max, Hornby, H, Cornish, Z, McIvaerty, K, Cartledge, J Great Britain

Involvement in organised sport and exercise as a junior doctor in the UK

Introduction:

We were interested whether involvement in organised sports and casual exercise is more challenging when starting work as a doctor, and what the barriers were stopping such involvement.

Methods:

We surveyed first-year doctors at a London hospital and got a response from 31 out of 41 doctors.

Results

Involvement in organised sport significantly reduced from final year at university to first year of work ($p<0.05$). 21/31 of responders would like to be involved in more organised sport and 18/31 would be, and a further 9 may be, interested in regular organised sport through the hospital.

The main barriers to organised sport were reduced free time (24/31), cost (18/31), irregular working hours (17/31), and lack of opportunity (14/31).

Interestingly involvement in exercise did not reduce from final year university to first year of work. However, 29/31 still said they would like to do more exercise. The main activities were going to the gym (15/31), running (14/31), and cycling (7/31).

The main barriers to exercise were reduced amount of spare time (26/31) and irregular working hours (18/31).

Conclusion:

Evidently there are barriers to sports and exercise that prevent junior doctors from doing as much as they would like. Some of these are related to the activities (e.g. cost and opportunities), while others relate to general work (e.g. reduced spare time) but others are more unique to healthcare (e.g. irregular work). We aim to try to overcome some of these by providing an opportunity for sports and exercise through the hospital.

Abstracts

KHIMJI, Hussain **Canada**

Lifestyle Medicine: Definition, Importance and Power of Exercise

Lifestyle Medicine is a specialty of conventional medicine that turns 20 years old in 2024 but has really gained momentum in the past 5 years.

Lifestyle medicine focuses on treating, preventing, and most importantly reversing chronic disease, through 6 key pillars:

Whole Food Plant Predominant Nutrition
Regular Exercise
Restorative Sleep
Stress Management
Social Connection
Avoidance of Risky Substances

The objectives of this presentation will be to educate colleagues on the specialty of Lifestyle Medicine, understand how clinical practices can be harnessed to achieve successful patient outcomes, how this can be applied to any field or specialty within medicine, and given the tournament is on sport, there will be a focus on exercise benefits and outcomes related to chronic disease that physicians, allied health and football/soccer players can relate to and learn from.

LEE, Sanghoon South Korea

Autoimmune connective tissue and dermatological diseases in children with autism spectrum disorder

Understanding the association between autism spectrum disorder (ASD) and specific comorbidities is essential. We assessed the risk of autoimmune connective tissue diseases and dermatological disorders in individuals with ASD. In this retrospective population-based birth cohort study, we linked the Korean National Birth Registry data with the National Health Insurance Service data. We included all patients born between 2002 and 2015 with ≥3 documented visits and an ICD-10 code of F84.x, through December 31, 2020, as well as 1:10 birth year, sex, insurance, income, and location of residence-matched controls without ASD from 2002 to 2019. Cox proportional hazards analyses were conducted using multiple demographic and comorbid covariates. We analyzed the incidence of 12 autoimmune connective tissue diseases and dermatological disorders in 28,944 individuals with ASD and 289,440 controls. The risks of alopecia areata and atopic dermatitis significantly increased, and the risk of vitiligo significantly decreased in individuals with ASD. In subgroup analysis, the risk of Sjögren's syndrome was significantly increased in female children, those born via cesarean section, and in multiparous mothers. This study highlighted the differential risks of specific autoimmune and dermatological disorders in individuals with ASD, emphasizing the need for increased clinical awareness and further research into underlying mechanisms.

MARICEVICH, Marco, Maricevich, R USA

Facial Fracture Related to Soccer

Facial fractures are common injuries among soccer players. This review aims to summarize the epidemiology, etiology, diagnosis, and management of facial fractures in soccer.

Soccer is a high-contact sport, which exposes players to the risk of facial trauma. Facial fractures account for a significant proportion of soccer-related injuries, with the maxilla, zygoma, and nasal bones being the most affected bones. Most facial fractures in soccer are caused by direct impact, such as a collision with another player, the ball, or the ground.

Diagnosis of facial fractures requires a thorough clinical examination, which includes inspection of the face, palpation of bony structures, and evaluation of ocular and nasal function. Radiological imaging, such as computed tomography (CT) scans, is often necessary to confirm the diagnosis and assess the severity of the fracture.

Management of facial fractures in soccer depends on the type and severity of the injury. Conservative treatment may be appropriate for minor fractures, while surgical intervention may be necessary for more complex injuries. The timing of surgery and the choice of surgical approach depend on several factors, including the patient's age, the location and extent of the fracture, and associated injuries.

Prevention of facial fractures in soccer requires a multidisciplinary approach, which includes the use of protective gear, such as helmets and face masks, as well as the implementation of rules and regulations aimed at reducing the risk of contact and collisions during play.

In conclusion, facial fractures are a common and potentially serious injury among soccer players. Early diagnosis and appropriate management are essential to minimize the risk of long-term complications and optimize outcomes. Prevention strategies should be emphasized to reduce the incidence and severity of these injuries in soccer.

MEDINA, Roberto **USA**

Sports hernia (athletico pubalgia)

Sports hernia

- Definition: Disruption of the fibrocartilaginous plate attachment

- Etiology: Hyperextension injury to the rectus abdominis insertion at the pubic symphysis. Occult hernia of the posterior inguinal wall without signs of a visualized tear. Result of an injury to the myotendinous structures adjacent to the pubic symphysis that stabilize the anterior pelvis.

- Sports and exercise that require repetitive rotation and extension of the upper leg and torso (ice hockey, soccer, rugby). Repetitive trunk hyperextension and thigh hyper-abduction causes shearing at the pubic symphysis. Following sports activities, athlete may be stiff and sore and after competition, mobility and practice can be difficult

- Muscle imbalances between strong proximal thigh muscles and relative weaker abdominal muscles are also risk factors.

- History: Insidious onset of groin pain with activity. Worsened with coughing or sneezing or explosive contractions. Been associated with sprinting or kicking. Pain at the pubic symphysis.

- Physical exam: Tenderness to palpation of the superior inguinal ring, posterior inguinal canal, pubic tubercle, or the conjoined tendon without a palpable hernia. Resisted sit-ups, active adduction or Valsalva may provoke pain. Pain radiates to adductor muscle origin and to the testicles.

- Diagnosis: MRI (good sensitivity and specificity), tearing of the hip adductors and rectus abdominis.

- Treatment: Surgical exploration is considered after failure of at least 6 to 8 weeks of conservative management. Both open or laparoscopic approaches can be used. Treatment hernias are repaired with or without the use of mesh and the athlete is allowed to return to play in 6 weeks with a laparoscopic repair and 6 months for an open repair. Other surgical procedures include repair of the adductor/rectus abdominis aponeurotic plate and adductor longus tenotomies or release.

Abstracts

MIRZA, Aisha Canada

Game changing Use of Ultrasound on the Sideline

Portable ultrasound can accurately assess soft tissue injuries, detect fractures, pneumothorax, evaluate nerve or vascular involvement. During the last Olympics, ultrasound showed 100% accuracy in cases that underwent confirmatory imaging.

MIRZA, Aisha Canada

Dermatological Conditions in Athletes

Unveiling skin conditions found in athletes from common to uncommon. In this presentation, we delve into the intricate world of skin conditions prevalent among athletes, ranging from commonly encountered to the rarer occurrences. As athletes push their bodies to the limits, their skin can often bear the brunt of their rigorous training routines, environmental exposures, and equipment usage. This potpourri of visual extravaganza will cover a spectrum of dermatological issues athletes may face, offering insights into identification, management and prevention strategies.

MORAL GAMEZ, Juan Alfonso, Lucendo-Noriega, Alicia, Garcia-Carmona, M. Spain

Doctor, I was Just About to Take a Corner Kick!

Introduction:
Peritalar dislocations are a rare entity (< 1%) within traumatic foot injuries. They occur due to a loss of anatomical relationship between the talocalcaneal and talonavicular joints, which maintains congruence of the tibiotalar joint in the context of high-energy accidents (falls from height, traffic accidents, and sports activities). Approximately 75% are medial dislocations associated with high-energy mechanisms and concomitant injuries such as fractures of the malleoli, navicular, or 5th metatarsal. These are orthopedic emergencies requiring prompt diagnosis, closed or open reduction, and subsequent immobilization.

Objective:
To present the case of a 32-year-old patient who suffered a medial peritalar dislocation of the left foot due to a torsional mechanism while playing soccer.

Methods:
A 32-year-old patient was brought to the ER by paramedic services after suffering a fall with a torsional mechanism of the left foot while attempting to take a corner kick during a soccer game, resulting in a medial peritalar dislocation. After diagnosis via simple radiography, an attempt was made to perform a closed reduction maneuver in the emergency department, which was unsatisfactory. In the operating room, under sedation, a closed reduction was performed using dynamic fluoroscopy control to confirm the stability of the talonavicular and subtalar joints. Immobilization was achieved with a posterior splint extending from the calf to the foot. A CT scan was requested post-reduction to check for joint congruence, revealing a small fracture of the dorsolateral margin of the navicular and a fracture of the medial and distal margin of the talus.

Results-Discussion:
Given the CT findings, a conservative management approach was decided, maintaining non-weight-bearing. After one month, the immobilization splint was replaced with a Walker boot allowing weight-bearing. Physiotherapy activity was also recommended to the patient. Two months post-injury, the Walker boot was removed, permitting pre-injury everyday activities if high-impact sports were avoided. Overall, the patient showed good progress. Thus, at eight months post-injury, the patient had returned to everyday lifestyle, including work, with occasional mild discomfort from residual inflammation.

Conclusion:
Peritalar dislocations are orthopedic emergencies requiring prompt reduction and subsequent immobilization. These are severe injuries with a high likelihood of early-onset arthritis despite the clinical-radiological discordance observed. Through the showcase of the current case study, this presentation hopes to shed light on potential treatment options for this type of injuries.

NUGENT, Michael, Bambrick, P Ireland

Ending Pyjama Paralysis; Physical Steps In The Right Direction For An Irish University Hospital

Background: The risk of hospital-associated deconditioning for frail older adults (i.e. reduced functional performance after acute hospitalisation, due to low activity levels during an admission) is well recognised yet continues to occur commonly. This quality improvement project aimed to promote a cultural change within two acute medical wards, in line with the principles of "End PJ Paralysis", which aims to "get patients out of bed, dressed in their own clothes and when possible, moving rather than lying in bed".

Methods: A multidisciplinary committee was formed to oversee this project. An initial audit on observed levels of patient activity was performed, along with a root cause analysis to identify points of action. A multicomponent intervention was designed and implemented over an 8-week period (Oct to Nov 2023), with weekly re-audit of activity levels. Data on the monthly incidence of falls & pressure areas, as well as average length-of-stay, was also collected, with the results for the intervention period (Q4) compared with the monthly averages for the nine months prior (Q1-3)

Results: A total of 570 Patients were included. Improvements were observed in all outcomes. The proportion of patients dressed in their own clothes increased from 28.5% (18/63) to 51.8% (263/507), those sitting out in a chair increased from 50% (32/63) to 64% (326/507), and those mobilising at the time of audit increased from 60% (38/63) to 71% (360/507). Average falls (Q1-3 vs Q4) fell from 14.8 to 12.6 per month, average pressure sores from 5.5 to 5 per month, and average length of stay from 11.20 to 10 days.

Conclusion: This project demonstrates that a ward-based multidisciplinary initiative can lead to an increase in the proportion of patients on an acute medical ward being dressed in their own clothes, sitting out, and mobilising, without an increase in the incidence of falls.

ONG, Stephen Australia

Ocular Trauma In Football

Ocular trauma is a rare but vision threatening risk for football players at all levels.

This talk will discuss mechanisms and outcomes of ocular trauma in football, with case histories, as well as measures to avoid and reduce the incidence of ocular trauma.

Abstracts

SCHROEDER, Travis Canada

Diagnosis and Management of Inguinal Hernias

This talk will review international hernia guidelines and provide a comprehensive overview of the diagnosis and management of groin hernias including inguinal, femoral and "sports" hernias. The talk will be geared toward primary care physicians.

SHERRIFF, Joanna New Zealand

Case Presentation of anorexia nervosa in a young football player and endocrine complications

This is a complex case of a 11-year-old keen football player with anorexia nervosa. She has a long and difficult path with her anorexia and has several metabolic and endocrine consequences, with hypoglycaemia. I will include a brief discussion about the proposed endocrine changes in anorexia and the lack of clear evidence and pathways for management of persistent hypoglycaemia in the context of anorexia and refeeding syndrome.

STUHN, Andreas, Leyk, D Germany

Risk Screening "Sports Health Check" Am I Healthy for Sports?

Implementation of a survey to screen the health risk of players and sharpen their attention to sports medical checkups in our local soccer association.

TEPLAN, Vladimir, Kysucan, J Czech republic

Simultaneous robotic resection of colorectal cancer and liver metastases

Robotic surgery is a rapidly emerging surgical technique worldwide, which has a number of advantages in comparison to the majority of surgical procedures used to date (shorter hospital stay, faster recovery, less pain at the surgical site, fewer surgical site infections, lower risk of incisional hernia and fewer conversions). We present a patient with colorectal cancer in the hepatic flexure and solitary hepatic metastasis (segment 2).

Right-sided hemicolectomy with intracorporeal side-to-side anastomosis was performed with the DaVinci Xi robotic system, as well as robotic resection of the second hepatic segment, without the necessity of changing the location (docking) of

the robotic instruments. Use of the minimally invasive robotic technique and ERAS protocol significantly accelerated postoperative recovery including recovery of peristalsis, reduced the need for analgesics, and the patient was discharged on the 5th postoperative day.

THOROUGHGOOD, Jamie Great Britain

When Can I go back to Yoga?

A diagnostic conundrum in a physically active young woman struck down with a sore throat and progressive myalgia progressing to unrelenting fever and breathlessness. The tale culminates in an initial refractory course and impending cardiac tamponade followed by rapid resolution and recovery with initiation of disease modifying treatment. Following the journey from diagnosis, deterioration and subsequent recovery to her livelihood; teaching yoga!

A human story of a young woman whose profession is to help others to participate in sport and live life fully and holistically struck down by an illness taking control of her own well-being away - right at the heart and pericardium of this wonderful conference.

ZOTTI, Mario, Tregilgas, H, Rathbone, E, Enser, B, Lincoln, A. **Australia**

Is the degree of patient satisfaction and extension strength following isolated lumbar extensor retraining related to lumbar multifidus morphology on MRI and/or other patient variables?

Function and radiographic appearances of the lumbar multifidus muscles (LMM) have been shown to be prognostic for outcomes of patients with low back pain. Isolated lumbar extensor retraining (ILE) is evidence-based for rehabilitation of lumbar extensors, including LMM. The interactions in subjects undergoing ILE between extensor strength improvement and patient satisfaction with MRI morphology of the LMM have not previously been characterised.

Methods:

Consecutive patients were included who completed at least 12 ILE sessions with pre- (t1) and post-training (t12) strength data and who had completed demographic and disorder questionnaires (including Oswestry Disability Index [ODI], Central Sensitisation Index [CSI], and Charlson comorbidity index [CCI]) as well as MRI imaging of LMM available within 6 months of ILE. A standardised ILE/core protocol was undertaken at a frequency of 1-2 sessions per week. T2-weighted MRI analysis occurred at the level of L4/5 and L5/S1 nerve roots, using Kader classification and percentage lean muscle of each LMM bundle. Satisfaction at the program completion was captured with a modified Likert score. Other variables studied as to their effects on strength and satisfaction included age, gender, Charlson comorbidity index, baseline ODI and CSI.

Results:

53 patients were included with a mean age of 47 years (standard deviation [SD] 18.07), 74% were male. The mean pre-treatment ODI and CSI for the cohort were 36 (SD 8.83) and 32 (SD 11.73) respectively with 94% of the cohort being CCI <5. 94% had moderate or severe atrophy (Kader 2-3).

82% of patients demonstrated improvement in extensor strength with the cohort showing a statistically significant increase between T1-T12 (p40% strength improvement and >75% initial lean muscle (n=21) there was a statistically significant difference in high satisfaction (Likert 4 or 5) compared to the patients with both <40% strength improvement and <75% lean muscle (p=0.02). CSI had mild correlation to lower muscle gain (r=-0.3).

A sub-group analysis included 14 patients with pre- and post-ILE retraining MRIs, with a mean age of 38 years (SD: 16.14), 79% male. Of these patients, those with lower Likert scores (1-3) when compared to those with higher Likert scores (4-5) had lower lean muscle % improvement.

Conclusion:

Patient satisfaction and improvement in extension strength following ILE retraining appears to be affected by multiple variables including pre-intervention CSI and relative improvements in strength and lean muscle.

Conference Manager:
Name: Dr Steven Doherty
PH: +61431460162
sandcdoherty@gmail.com

Further Information

Visit the WMFC 2024 Website:
https://wmfc2024.com/

Contact the Organising Committee:
https://wmfc2024.com/index.php/contact/
E: wmfc2024@outlook.com

Social Media:
WMFC 2024 Facebook
WMFC 2024 Instagram

Competition Rules:
https://wmfc2024.com/index.php/2024/03/27/rules-updated/

Conference Team

Dr Steven Doherty, Dr Stephen Ong, Dr Jack Gilpin, Dr Paul Bloomfield

Organising Committee

Dr Alan Jones, Dr Jack Gilpin, Dr Paul Bloomfield, Dr Andrew Teh, Dr Ross Cairns, Dr Christopher Ross, Dr David Ghan

Major Event Partners:

"Thank you for your engagement and participation in the 28th International Symposium of Medicine and Health in Sport"

The Australian Organising Committee

Major Event Partners: