**Table 4 Descriptive Observational Studies and Guidelines**

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| **ARTICLES AND AUTHORS** | **YEAR AND DESIGN OF STUDY** | **TOPICS AND INDICATIONS** | **CONCLUSIONS** |
| (36) What we can learn from existing evidence about physical activity for juvenile idiopathic arthritis?  Brosseau L, Maltais DB, Kenny GP | 2015  Editorial | The description of the PA intervention used for JIA in future studies should be more explicit and key characteristics of the intervention [e.g. types of PA, PA dosage (volume, intensity, duration)] should be provided for potential users and for clinical and research replication purposes Despite the fact that there has been an increase in the number of studies examining the benefits of PA in the management of JIA in children and adolescents, there remains a paucity of information about which types of PA are best for supporting joint development and bone health in children. | More rigorously designed trials are needed to optimize the implementation and use of PA in managing JIA. |
| (34) Can I play?  LeBlanc CM, Lands LC. | 2014  Case-reports | S. age 10 years, has polyarticular juvenile idiopathic arthritis (presented with symmetric arthritis in many small and large joints). Sarah asked her physician if she can join her friends’ soccer team. All children, including those with JIA should follow the American Academy of Pediatrics recommendations of at least 60 minutes of moderate-to-vigorous physical activity daily and less than 2 hours per day spent being sedentary. Sarah can safely participate in soccer as long as her disease is well controlled (no actively inflamed joints), and she has adequate physical capacity, without major risk of disease exacerbation. It would also be helpful for her to take part in balance, flexibility, and strengthening exercises. |  |
| (35) An aquatic physical therapy program at a pediatric rehabilitation hospital: a case series.  Fragala-Pinkham MA, Dumas | 2009  Case-reports | Child, 2years old, with JIA (left knee pain with reduce range of motion and strength). The plan of care was PT for 45 to 60 minutes, 2 times per week, once aquatic-based outpatient, and once land-based through an early intervention program for a total of 6 months. In the pool she made squat, gait training, shuttle running, jumping, Step ups with focus on leading with left leg, active/passive ROM. Outside the pool she rode tricycle. Clinically significant improvements were documented in functional mobility, walking endurance, range of motion, muscle strength, and/or pain reduction. An aquatic PT program has been a successful addition to a pediatric rehabilitation program. | Further research is needed to determine the effectiveness of individual aquatic PT interventions for young patients with disabilities. |
| (37) Linea Guida Reumatologia, regione Toscana. | 2014  Region Guidelines | Physical therapy has the purpose to properly use the joints so that the child will not use abnormal motor patterns that may imply functional deficits. The functional evaluation, by the doctor, physical therapist and parents and/or patient, is standardized through del Childhood Health Assessment Questionnaire (CHAQ). This instrument specifically measures functional abilities in normal daily activities (dressing, getting up, eating, walking, personal hygiene, range of motion , grip) in children with JIA. It’s important to reduce excessive load on the active joint and to encourage the correct use with position splint and/or immobilisation splint; a warm bath in the morning is indicated to reduce joint stiffness upon awakening. Ice is a valuable means to control inflammation. | No recommendations about physical exercise. |
| (38) Clinical guideline for the diagnosis and management of juvenile idiopathic arthritis | 2009 National Guidelines | It is the consensus of the Royal Australian College of General Practitioners Working Group and Australian paediatric rheumatology experts that regular physical activity compatible with children’s general abilities and the restrictions of their disease is recommended. Regular physical activity promotes normal childhood development and may combat the adverse effects of disease on muscle strength, endurance and aerobic capacity.  It is the consensus of the RACGP Working Group and Australian paediatric rheumatology experts that hydrotherapy on an individualised basis is recommended for some patients with JIA, and that this is considered a safe form of exercise. | land exercise GRADE C. RECOMMENDATION aquatic exercise GRADE C. |