



Apophyseal injuries: **not** the self-limiting condition we once thought?

Long-term outcome of conservatively treated lower limb apophysitis in children and adolescents: a systematic review

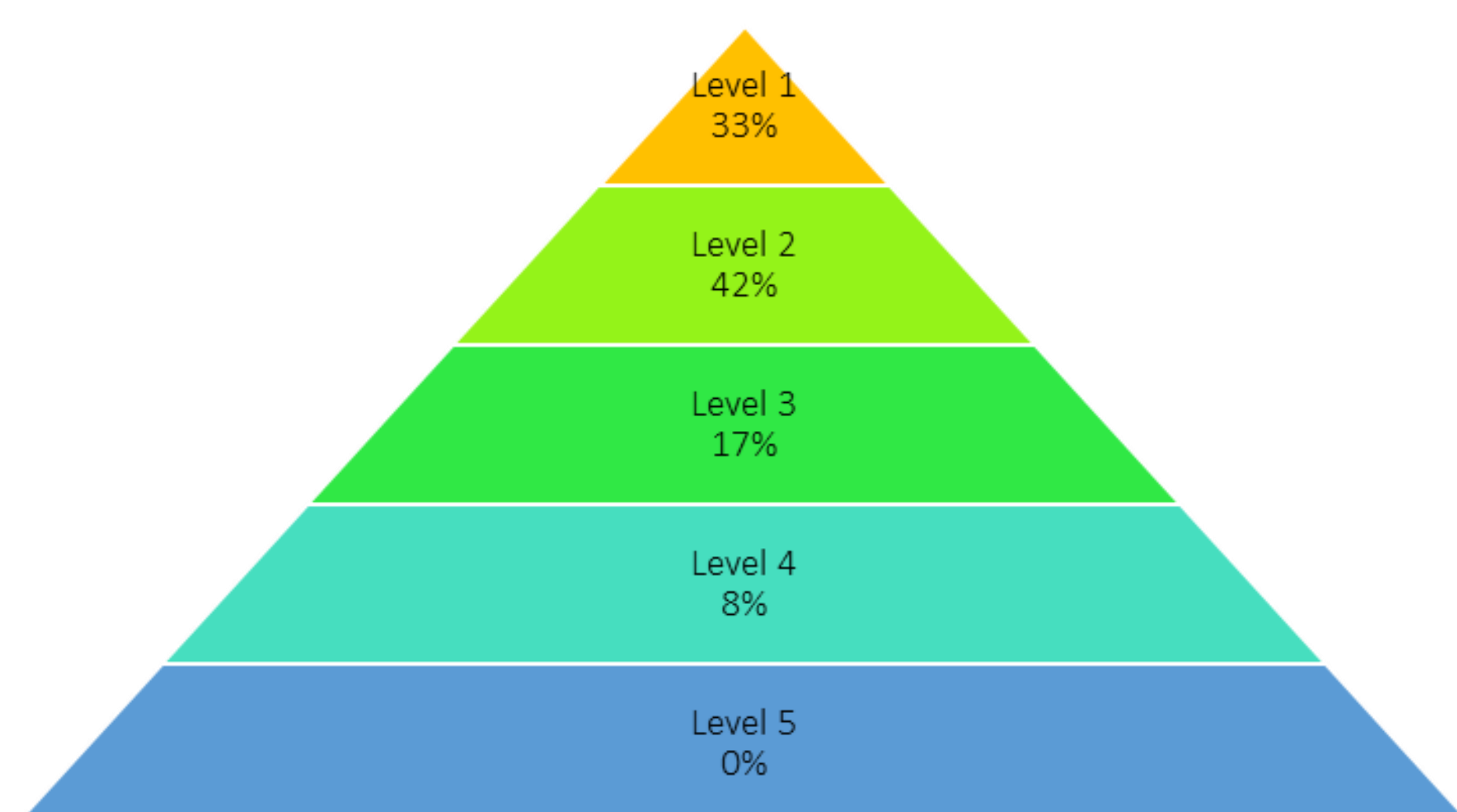
INTRODUCTION

🚑 Children with activity-related pain around the tendon insertion site.

💡 Course of apophysitis correlated with gradual closure of the growth plate **or** long-term consequences?

METHODS

- **Osgood-Schlatter**, **Sever's** or **Sinding-Larsen-Johansson** disease.
- Included 12 studies: >1y follow-up.
- MEDLINE, EMBASE, Cochrane CENTRAL, PEDro and SPORTdiscus.



- Traditional single-hierarchy evidence model.
- Outcome measures: pain, secondary structural changes, functional outcome, sport participation, return to sport, recurrent or subsequent injury.

RESULTS

OSD

- **Pain** or discomfort: 27% (142/520) (**fig 1**).
- **Prominent tibial tuberosity** limiting sport participation: 21% (74/343) (**fig 2**).
- Lower functional outcome.
- Usually **full return to sport** (**fig 3**).
- Positive influence of conservative treatment.
- **Relapse**: 12% (36/299) (**fig 4**).

SD

- **Pain** when active at their level: 30% (12/40).
- **Relapse**: 15% (6/40).

SLJD

- No studies.

LIMITATIONS

- Lack of high-quality research studies.
- High risk of bias in studies on OSD.

DISCUSSION

- **Early implementation of conservative treatment** improves prognosis.
- Need for closer prolonged follow-up.
- At risk for **developing tendinopathy** ❓

Figure 1

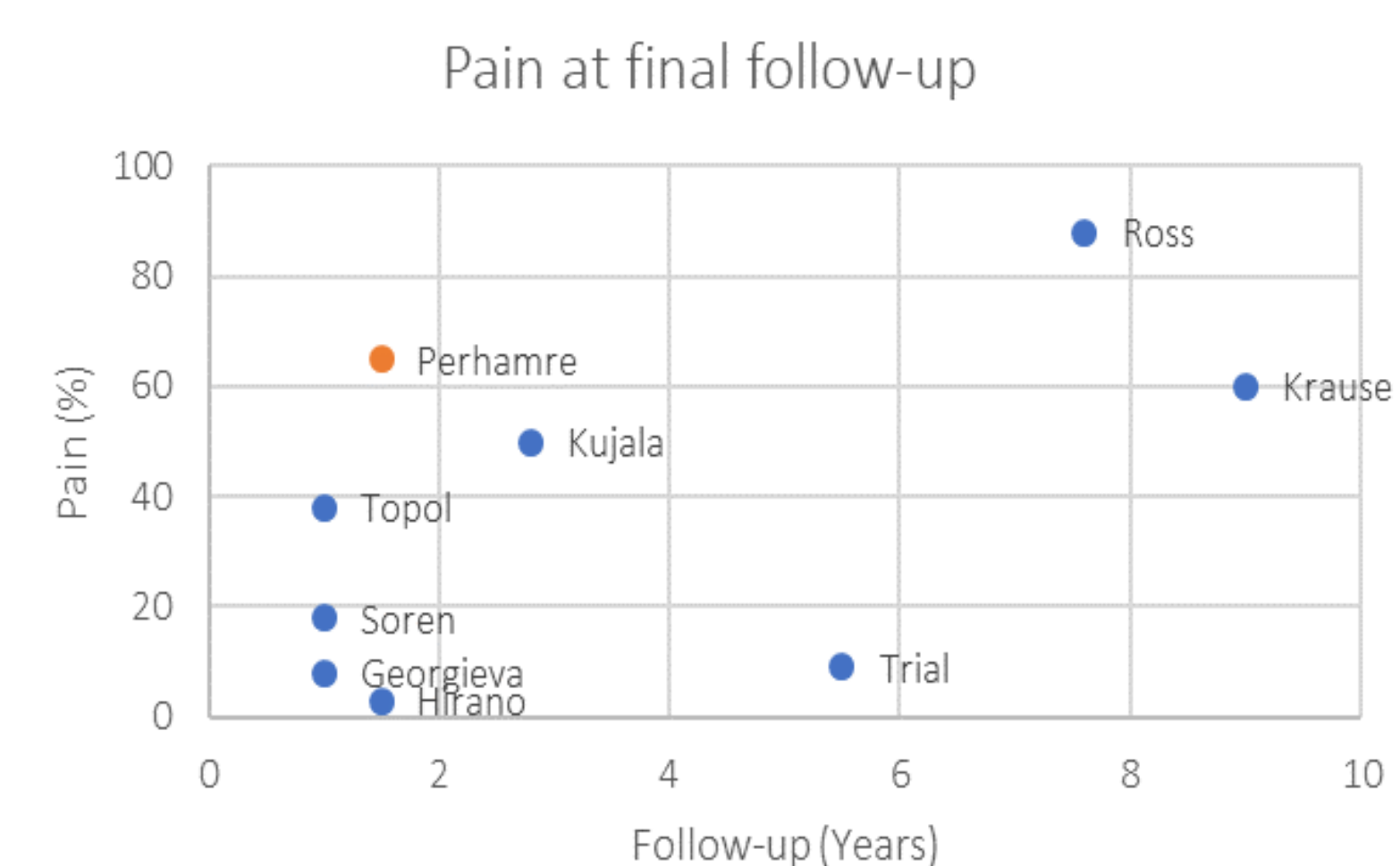


Figure 2

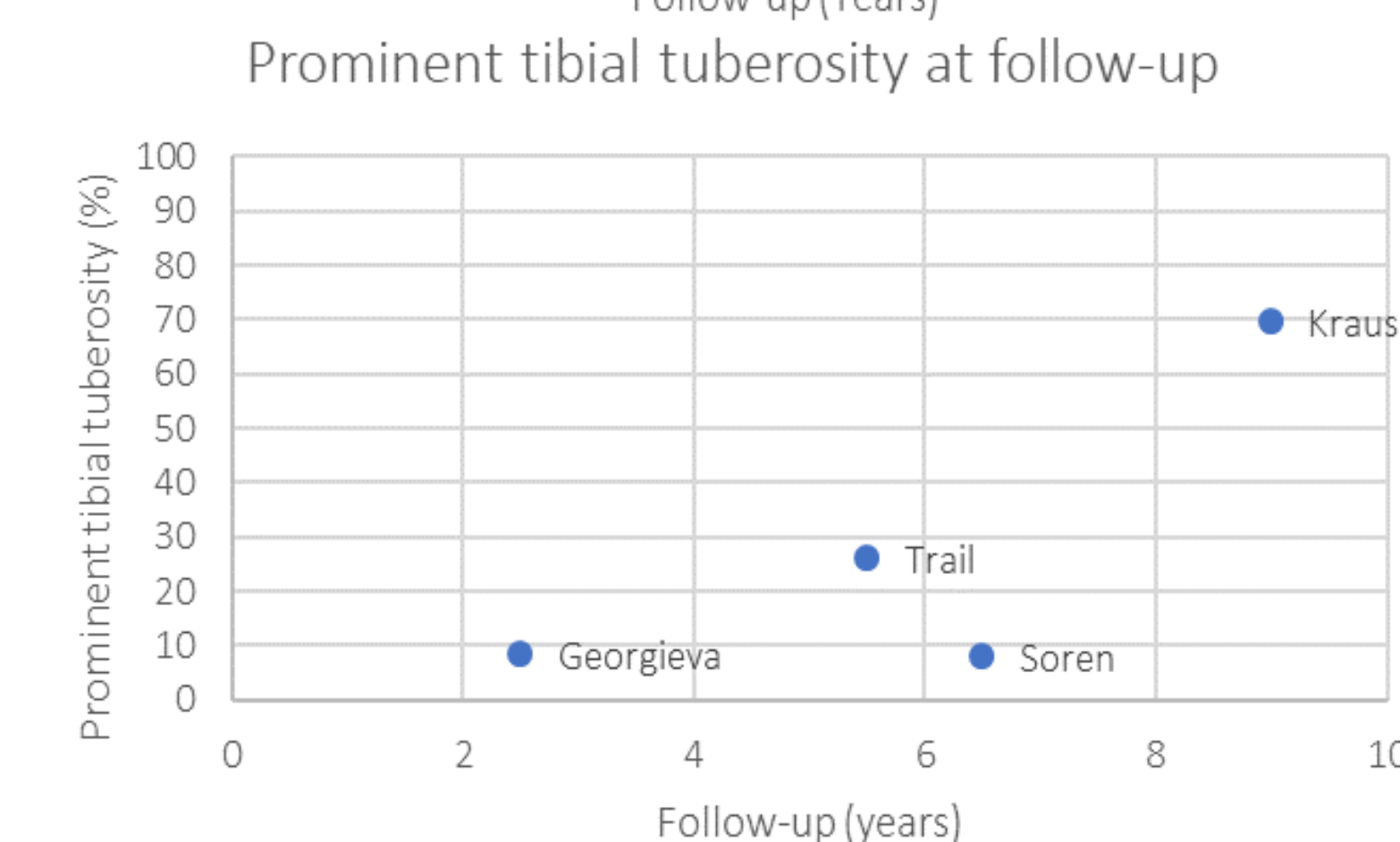


Figure 3

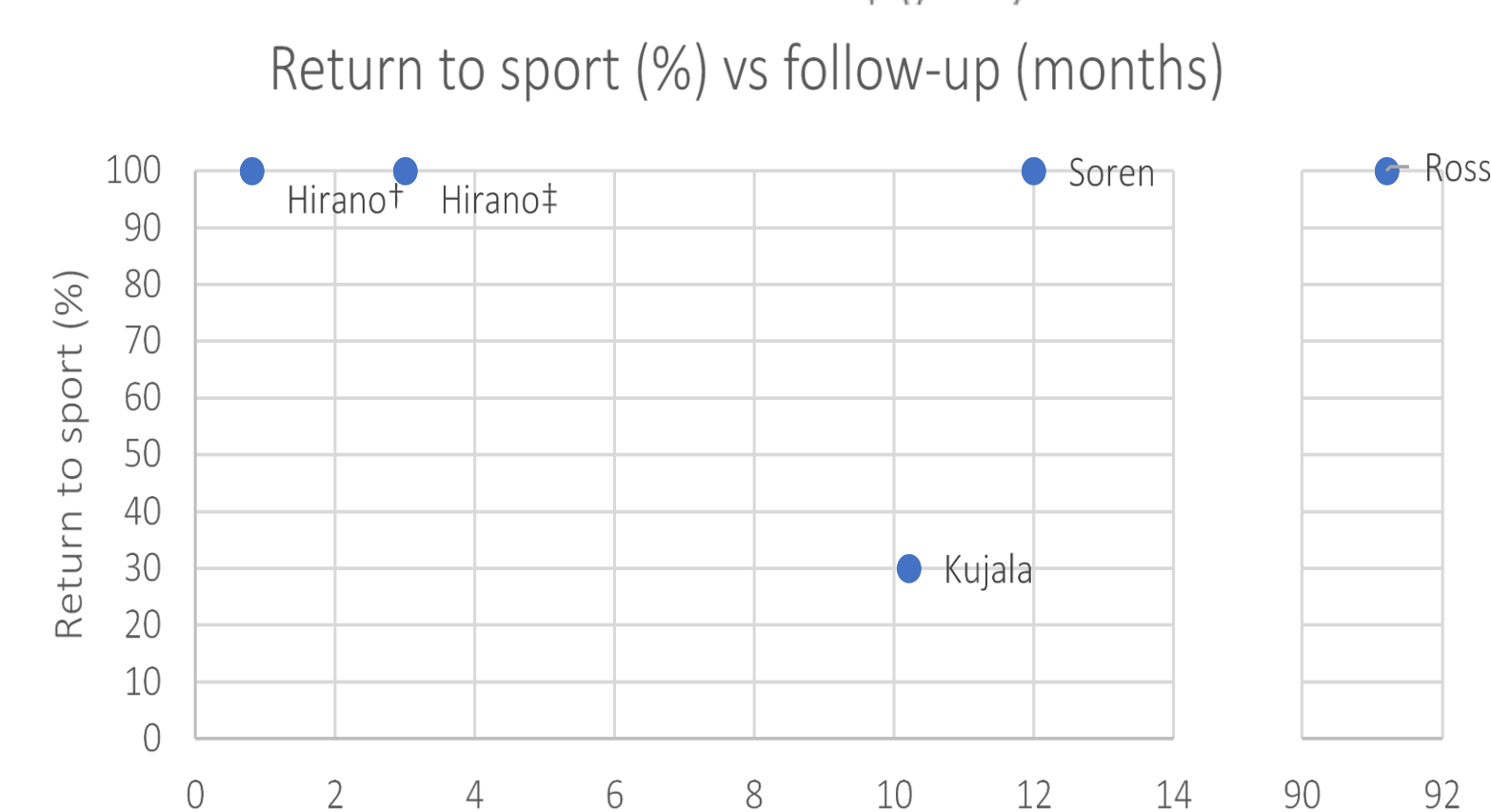
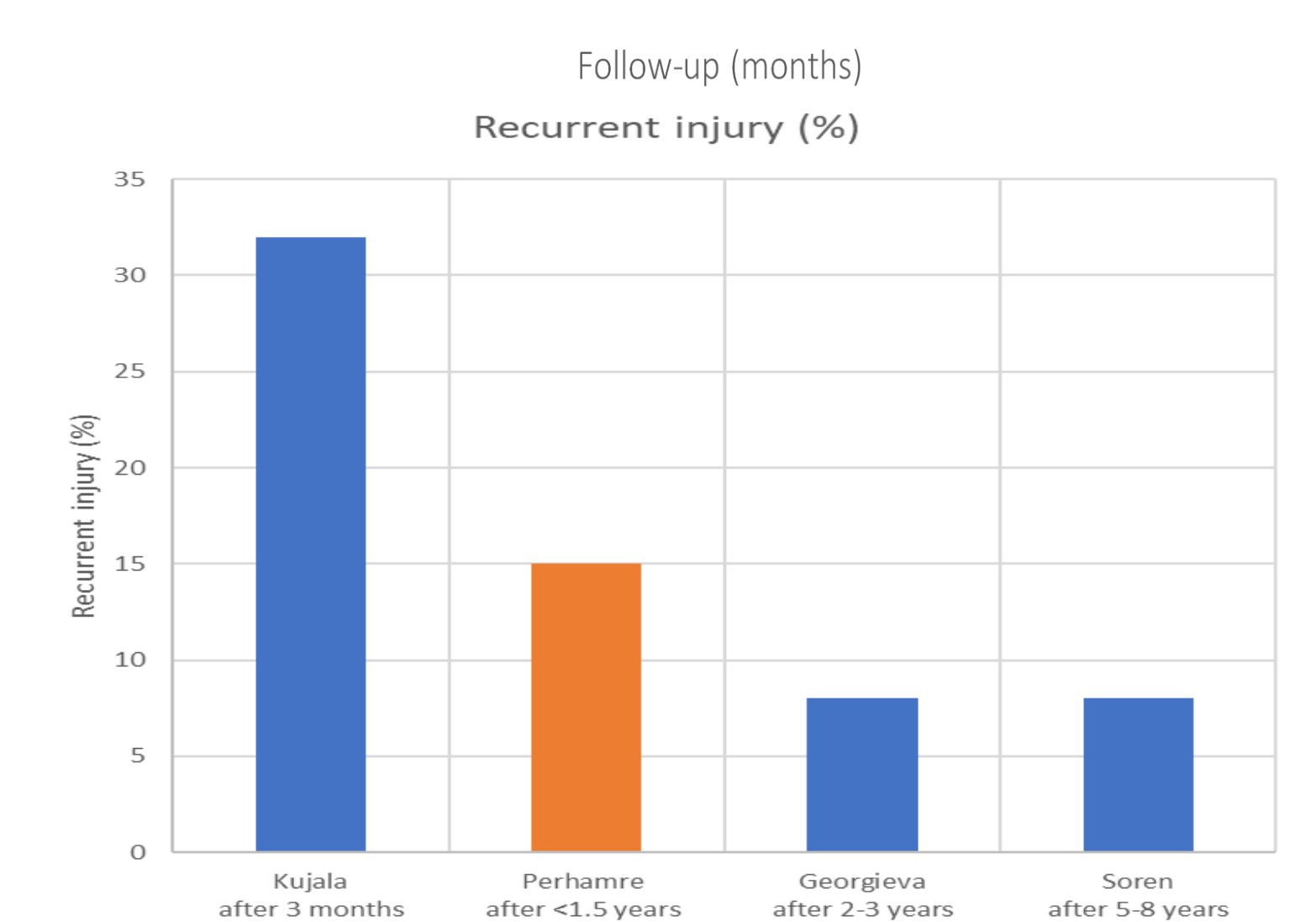


Figure 4



Blue: Osgood-Schlatter disease. Orange: Sever's disease.