







**Table 2. Incidence of tendinopathy.**

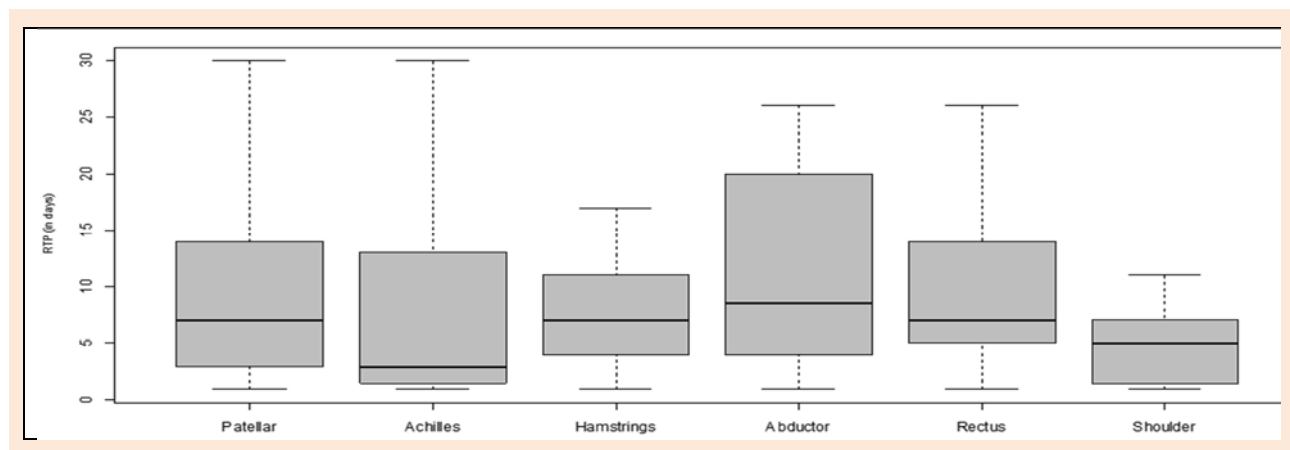
		Num. of Injuries	Athlete-exposure (AE)	Incidence (95% CI)	
Sport	Basketball	Professional	140	203	69.9 (58.0 -81.4)
		Youth	107	422	25.4 (20.8 -30.6)
	Football	Professional	136	411	33.1 (27.8 -39.1)
		Youth	113	1052	10.7 (8.9 -12.9)
	Women Football	Professional	39	257	15.2 (10.8 -20.7)
		Youth	21	228	9.2 (5.7 -14.1)
	Futsal	Professional	55	152	36.2 (27.3 -47.1)
		Youth	21	177	11.9 (7.3 -18.1)
	Handball	Professional	66	248	26.6 (20.6 -33.9)
		Youth	71	478	14.9 (11.6 -18.7)
Roll Hockey	Professional	47	73	64.4 (47.3 -85.6)	
	Youth	27	138	19.6 (12.9 -28.5)	
Gender	Female	60	485	12.4 (9.4 - 15.9)	
	Male	783	3354	23.3 (21.7 - 25)	
Category	Youth	360	2495	14.4 (13 -16)	
	Professional	483	1344	35.9 (32.8 - 39.3)	
Surface	Outdoor	385	2277	16.9 (15.3 -18.7)	
	Indoor	458	1562	29.3 (26.7 - 32.1)	
Time-Loss	No	546	2887	18.9 (17.4 -20.6)	
	Yes	297	2771	10.7 (9.5- 12)	
Severity	No time loss	546	2887	18.9 (17.4 -20.6)	
	1-3 days	76	1062	7.2 (5.6 - 9)	
	4-7 days	82	1221	6.7 (5.3 -8.3)	
	8-28 days	98	1333	7.4 (6 - 9)	
	>28 days	41	674	6.1 (4.4 -8.3)	

95%CI: (16.6-30.2); youth 11.4, 95%CI: (8.4-15.1)], representing more than double that observed in professional football players (7.1, 95%CI: (4.7-10.1)). The incidence of Achilles tendinopathy was also higher in professional basketball [19.7, 95%CI: (14.1-26.8)], less so in youth basketball, followed by professional indoor football [7.9, 95%CI: (4.1-13.8)]. The incidence of hamstring tendinopathy was higher in professional roller hockey players [6.8, 95%CI: (2.2-16.0)], followed by professional football players [1.5, 95%CI: (0.5-3.2)]. The incidence of adductor tendinopathy was also highest in professional roller hockey [11.0, 95%CI: (4.7-21.6)], followed by professional and indoor football. The incidence of rectus femoris tendinopathy was highest in indoor professional football [2.0, 95%CI: (0.4-5.8)], followed by youth football [1.8, 95%CI: (1.1-2.8)]. Finally shoulder tendinopathy was the highest in handball

[5.2, 95%CI: (2.8-9.0)] followed by roller hockey [4.1, 95%CI: (0.8-12.0)] and basketball [3.0, 95%CI: (1.1-6.4)] - (Table 3). The incidences of other tendinopathies (Other Knee, Other Ankle and Others) are shown in the Supplementary Table 4.

### Return to play

Most tendinopathies did not cause the player to miss training or matches (64.4%), and only 5% had a severe effect on play (>28 days lost). Among tendinopathies that resulted in TL but did not involve rupture (n = 158), the median time to RTP was 7 days (interquartile range [IQR]:3-14). RTP time was the longest in cases of *adductor longus* tendinopathy and was most variable in cases involving the most commonly affected tendons, the patellar (IQR:3-14 days) and Achilles (IQR:1.7-12.5 days) tendons (Figure 2).



**Figure 2.** A box plot of time to return to play, according to type of tendinopathy

**Table 3. Incidence of tendinopathies (Patellar, Achilles, Hamstring, Adductor, Rectus Femoris and Shoulder)**

		Patellar		Achilles		Hamstrings		Abductor		Rectus		Shoulder			
		AE	n	Incidence (95% CI)	n	Incidence (95% CI)	n	Incidence (95% CI)	n	Incidence (95% CI)	n	Incidence (95% CI)	n	Incidence (95% CI)	
Sport	Basketball	Professional	203	46	22.7 (16.6 - 30.2)	40	19.7 (14.1 - 26.8)	1	0.5 (0.0 - 2.7)	1	0.5 (0.0 - 2.7)	1	0.5 (0.0 - 2.7)	6	3.0 (1.1 - 6.4)
		Youth	422	48	11.4 (8.4 - 15.1)	8	1.9 (0.8 - 3.7)	2	0.5 (0.1 - 1.7)	1	0.2 (0.0 - 1.3)	2	0.5 (0.1 - 1.7)	4	0.9 (0.3 - 2.4)
	Football	Professional	411	29	7.1 (4.7 - 10.1)	20	4.9 (3.0 - 7.5)	6	1.5 (0.5 - 3.2)	21	5.1 (3.2 - 7.8)	4	1.0 (0.3 - 2.5)	5	1.2 (0.4 - 2.8)
		Youth	1052	10	1.0 (0.5 - 1.7)	2	0.2 (0.0 - 0.7)	4	0.4 (0.1 - 1.0)	10	1.0 (0.5 - 1.7)	19	1.8 (1.1 - 2.8)	3	0.3 (0.1 - 0.8)
	Women's Football	Professional	257	4	1.6 (0.4 - 4.0)	6	2.3 (0.9 - 5.1)	3	1.2 (0.2 - 3.4)	2	0.8 (0.1 - 2.8)	4	1.6 (0.4 - 4.0)	2	0.8 (0.1 - 2.8)
		Youth	228	4	1.8 (0.5 - 4.5)	1	0.4 (0.0 - 2.4)	0	0.0 (0.0 - 1.6)	0	0.0 (0.0 - 1.6)	3	1.3 (0.3 - 3.8)	1	0.4 (0.0 - 2.4)
	Futsal	Professional	152	8	5.3 (2.3 - 10.4)	12	7.9 (4.1 - 13.8)	2	1.3 (0.2 - 4.8)	5	3.3 (1.1 - 7.7)	3	2.0 (0.4 - 5.8)	1	0.7 (0.0 - 3.7)
		Youth	177	5	2.8 (0.9 - 6.6)	1	0.6 (0.0 - 3.1)	0	0.0 (0.0 - 2.1)	10	5.6 (2.7 - 10.4)	0	0.0 (0.0 - 2.1)	1	0.6 (0.0 - 3.1)
	Handball	Professional	248	16	6.5 (3.7 - 10.5)	11	4.4 (2.2 - 7.9)	1	0.4 (0.0 - 2.2)	1	0.4 (0.0 - 2.2)	1	0.4 (0.0 - 2.2)	13	5.2 (2.8 - 9.0)
		Youth	478	10	2.1 (1.0 - 3.8)	7	1.5 (0.6 - 3.0)	1	0.2 (0.0 - 1.2)	5	1.0 (0.3 - 2.4)	7	1.5 (0.6 - 3.0)	13	2.7 (1.4 - 4.7)
	Roller Hockey	Professional	73	0	0.0 (0.0 - 5.1)	1	1.4 (0.0 - 7.6)	5	6.8 (2.2 - 16.0)	8	11.0 (4.7 - 21.6)	0	0.0 (0.0 - 5.1)	3	4.1 (0.8 - 12.0)
		Youth	138	1	0.7 (0.0 - 4.0)	1	0.7 (0.0 - 4.0)	1	0.7 (0.0 - 4.0)	5	3.6 (1.2 - 8.5)	0	0.0 (0.0 - 2.7)	3	2.2 (0.4 - 6.4)
	Gender	Female	485	8	1.6 (0.7 - 3.3)	7	1.4 (0.6 - 3.0)	3	0.6 (0.1 - 1.8)	2	0.4 (0.0 - 1.5)	7	1.4 (0.6 - 3.0)	3	0.6 (0.1 - 1.8)
		Male	3354	173	5.2 (4.4 - 6.0)	103	3.1 (2.5 - 3.7)	23	0.7 (0.4 - 1.0)	60	1.8 (1.4 - 2.3)	37	1.1 (0.8 - 1.5)	52	1.6 (1.2 - 2.0)
Category	Young	2495	78	3.1 (2.5 - 3.9)	20	0.8 (0.5 - 1.2)	8	0.3 (0.1 - 0.6)	24	1.0 (0.6 - 1.4)	31	1.2 (0.8 - 1.8)	25	1.0 (0.6 - 1.5)	
	Senior	1344	103	7.7 (6.3 - 9.3)	90	6.7 (5.4 - 8.2)	18	1.3 (0.8 - 2.1)	38	2.8 (2.0 - 3.9)	13	1.0 (0.5 - 1.7)	30	2.2 (1.5 - 3.2)	
Surface	Outdoor	2277	60	2.6 (2.0 - 3.4)	42	1.8 (1.3 - 2.5)	15	0.7 (0.4 - 1.1)	41	1.8 (1.3 - 2.4)	33	1.4 (1.0 - 2.0)	13	0.6 (0.3 - 1.0)	
	Indoor	1562	121	7.7 (6.4 - 9.3)	68	4.4 (3.4 - 5.5)	11	0.7 (0.4 - 1.3)	21	1.3 (0.8 - 2.1)	11	0.7 (0.4 - 1.3)	42	2.7 (1.9 - 3.6)	
Time-Loss	No	2887	138	4.8 (4.0 - 5.6)	81	2.8 (2.2 - 3.5)	16	0.6 (0.3 - 0.9)	25	0.9 (0.6 - 1.3)	12	0.4 (0.2 - 0.7)	35	1.2 (0.8 - 1.7)	
	Yes	2771	43	1.6 (1.1 - 2.1)	29	1.1 (0.7 - 1.5)	10	0.4 (0.2 - 0.7)	37	1.3 (0.9 - 1.8)	32	1.2 (0.8 - 1.6)	20	0.7 (0.4 - 1.1)	
Severity	No Time-loss	2887	138	4.8 (4.0 - 5.6)	81	2.8 (2.2 - 3.5)	16	0.6 (0.3 - 0.9)	25	0.9 (0.6 - 1.3)	12	0.4 (0.2 - 0.7)	35	1.2 (0.8 - 1.7)	
	1-3 days	1062	12	1.1 (0.6 - 2.0)	15	1.4 (0.8 - 2.3)	2	0.2 (0.0 - 0.7)	7	0.7 (0.3 - 1.4)	3	0.3 (0.1 - 0.8)	9	0.8 (0.4 - 1.6)	
	4-7 days	1221	11	0.9 (0.4 - 1.6)	4	0.3 (0.1 - 0.8)	3	0.2 (0.1 - 0.7)	9	0.7 (0.3 - 1.4)	12	1.0 (0.5 - 1.7)	6	0.5 (0.2 - 1.1)	
	8-28 days	1333	13	1.0 (0.5 - 1.7)	8	0.6 (0.3 - 1.2)	3	0.2 (0.0 - 0.7)	19	1.4 (0.9 - 2.2)	11	0.8 (0.4 - 1.5)	4	0.3 (0.1 - 0.8)	
	>28 days	674	7	1.0 (0.4 - 2.1)	2	0.3 (0.0 - 1.1)	2	0.3 (0.0 - 1.1)	2	0.3 (0.0 - 1.1)	6	0.9 (0.3 - 2.0)	1	0.2 (0.0 - 0.8)	

**Discussion**

The main finding of this study was that the relative frequency of tendinopathy is 22% of the total number of players registered at the club during the study period of 8 seasons (2008-2016). The incidence of injury was the highest in professional basketball [69.9, 95%CI: (58.0-81.4), Table 2] followed by professional roller hockey [64.4, 95%CI: (47.3-85.6), Table 2], and professional futsal [36.2, 95%CI: (27.3 -47.1), Table 2]. With regards to the most commonly affected tendons, patellar tendon [11.7, 95%CI: (10.0 -13.5), Table 3] and Achilles tendon [10.3, 95%CI: (8.5-12.5), Table 3]. The longest times to RTP were associated with tendinopathy of the hip adductor, and the most common tendinopathies,

patellar and Achilles, demonstrated considerable variability the RTP times.

In our data, the highest incidence of tendinopathy was observed in professional basketball and roller hockey players, which is consistent with the past evidence given that it has found the highest incidence in basketball (Zwerwer et al., 2011), handball (Janssen et al., 2015) and football players (Häggglund et al., 2011). It should be taken into account that these sports have, in matches and in training sessions, repetitive plyometric movements such as high-speed jumping, which is demanding for the tendons, especially Achilles and patellar tendon (Malliaras et al., 2013; 2015). Knowing which sports a higher incidence of tendinopathy and the most commonly affected tendons are likely useful to develop appropriate injury prevention strategies.

**Table 4. Other knee and ankle tendinopathy incidence.**

		AE	n	Other Knee		Other Ankle		Others	
				Incidence (95% CI)	n	Incidence (95% CI)	n	Incidence (95% CI)	
Sport	Basketball	Professional	203	4	2.0 (0.5 - 5.0)	17	8.4 (4.9 - 13.4)	6	3.0 (1.1 - 6.4)
		Youth	422	8	1.9 (0.8 - 3.7)	8	1.9 (0.8 - 3.7)	26	6.2 (4.0 - 9.0)
	Football	Professional	411	8	1.9 (0.8 - 3.8)	16	3.9 (2.2 - 6.3)	5	1.2 (0.4 - 2.8)
		Youth	1052	11	1.0 (0.5 - 1.9)	14	1.3 (0.7 - 2.2)	40	3.8 (2.7 - 5.2)
	Women's Football	Professional	257	9	3.5 (1.6 - 6.6)	1	0.4 (0.0 - 2.2)	2	0.8 (0.1 - 2.8)
		Youth	228	4	1.8 (0.5 - 4.5)	2	0.9 (0.1 - 3.2)	6	2.6 (1.0 - 5.7)
	Futsal	Professional	152	5	3.3 (1.1 - 7.7)	8	5.3 (2.3 - 10.4)	1	0.7 (0.0 - 3.7)
		Youth	177	1	0.6 (0.0 - 3.1)	7	4.0 (1.6 - 8.1)	3	1.7 (0.3 - 5.0)
	Handball	Professional	248	9	3.6 (1.7 - 6.9)	4	1.6 (0.4 - 4.1)	13	5.2 (2.8 - 9.0)
		Youth	478	5	1.0 (0.3 - 2.4)	4	0.8 (0.2 - 2.1)	19	4.0 (2.4 - 6.2)
	Roll Hockey	Professional	73	6	8.2 (3.0 - 17.9)	0	0.0 (0.0 - 5.1)	3	4.1 (0.8 - 12.0)
		Youth	138	2	1.4 (0.2 - 5.2)	2	1.4 (0.2 - 5.2)	12	8.7 (4.5 - 15.2)
	Category	Youth	2495	31	1.2 (0.8 - 1.8)	37	1.5 (1.0 - 2.0)	106	4.2 (3.5 - 5.1)
		Professional	1344	41	3.1 (2.2 - 4.1)	46	3.4 (2.5 - 4.6)	104	7.7 (6.3 - 9.4)
Gender	Female	485	13	2.7 (1.4 - 4.6)	3	0.6 (0.1 - 1.8)	14	2.9 (1.6 - 4.8)	
	Male	3354	59	1.8 (1.3 - 2.3)	80	2.4 (1.9 - 3.0)	196	5.8 (5.1 - 6.7)	
Surface	Outdoor	2277	38	1.7 (1.2 - 2.3)	48	2.1 (1.6 - 2.8)	95	4.2 (3.4 - 5.1)	
	Indoor	1562	34	2.2 (1.5 - 3.0)	35	2.2 (1.6 - 3.1)	115	7.4 (6.1 - 8.8)	
Time-loss	No	2887	41	1.4 (1.0 - 1.9)	51	1.7 (1.3 - 2.3)	147	5.1 (4.3 - 6.0)	
	Yes	2771	31	1.1 (0.8 - 1.6)	32	1.2 (0.8 - 1.7)	63	2.3 (1.7 - 2.9)	
Severity	No Time Loss	2887	41	1.4 (1.0 - 1.9)	51	1.8 (1.3 - 2.3)	147	5.1 (4.3 - 6.0)	
	1-3 Days	1062	3	0.3 (0.1 - 0.8)	13	1.2 (0.7 - 2.1)	12	1.1 (0.6 - 2.0)	
	4-7 Days	1221	11	0.9 (0.4 - 1.6)	7	0.6 (0.2 - 1.2)	19	1.6 (0.9 - 2.4)	
	8-28 Days	1333	10	0.8 (0.4 - 1.4)	5	0.4 (0.1 - 0.9)	25	1.9 (1.2 - 2.8)	
	>28 Days	674	7	1.1 (0.4 - 2.2)	7	1.0 (0.4 - 2.1)	7	1.1 (0.4 - 2.2)	

While Achilles and patellar tendons are commonly affected by tendinopathy in professional athletes, the prevalence of symptoms and morphological changes from adolescents to adults is unclear (Cassel et al., 2015; Visnes et al., 2015). A past investigation showed that patellar tendinopathy was more common than Achilles tendinopathy in adolescent athletes, (Lian et al., 2005) and our study results support the finding. Incidence of patellar tendinopathy [3.1, 95%CI: (2.5-3.9)] was higher than Achilles tendinopathy incidence [0.8, 95%CI: (0.5-1.2), Table 3]. However, once the level changed from young to professional status (older than 18 years old), the incidence between patellar and Achilles tendinopathy became comparable, indicating patellar tendinopathy of [7.7, 95%CI: (6.3-9.3)] and Achilles tendon of [6.7, 95%CI: (5.4-8.2), Table 3]. Furthermore, this is not unexpected since studies in the past indicated that tendinopathy prevalence increases with age. (Simpson et al., 2016; Cassel et al., 2015). Among adolescent athletes, patellar tendinopathy was more common than Achilles tendinopathy (Lian et al., 2005).

Furthermore, incidence was also higher among male athletes than among female athletes (ratio 9:1), which is consistent with a study that reported higher incidence of tendon related pathologies in men than in women (Morrison et al., 2015). This may be explained by many sex differences including hormone differences (i.e. estrogen may be protective in females until menopause) or sex differences in load-profile (e.g. high peak load and tendon stress in men (ref-include maximal jump ref being higher in men) and tendon mechanical property profiles for the Achilles (Kubo et al., 2003) and patellar tendon (Onambélé et al., 2007).

Another interesting finding of this study is effect of

playing surface. A higher incidence of tendinopathies was observed in indoor compared to outdoor sports. The potential underlying mechanism may be because indoor sports involve more jumping actions (volleyball, basketball and handball). Additionally, there may also be more abrupt stopping and changes of directions because the playing space is smaller than playing space of outdoor sports. Indoor playing surfaces (usually parquet or cement) are also known as harder than outdoor surfaces (usually clay or grass). This may be a crucial extrinsic risk factor for tendinopathy due to excessive loading to the tendons in repetitive stress in nature that can lead to an overuse and, and may be resulted in tendon pathology (FCB, 2010; Paavola et al., 2005; Ferretti, 1986).

Consistent with most previous studies (Zwerver et al., 2011; Häggglund et al., 2011; Orchard et al., 2013; De Vries et al., 2017), the most common tendinopathy in our cohort was patellar tendinopathy, followed by Achilles tendinopathy. This finding is expected, since the patellar and Achilles are the largest locomotor tendons in the lower limb and have a key role in storing and releasing energy during stretch shorten cycle activities (Docking et al., 2016; 2018; Cook et al., 2016; Rio et al., 2014; Malliaras et al., 2013). Their histological, structural, biomechanical and functional characteristics make them more susceptible to injury, regardless of the workload (de Jonge et al., 2011; Lian et al., 2005; Magnusson et al., 2010).

In professional football there was a high incidence of adductor tendinopathy (5.1 and 1.0 in professional and youth players, respectively). Previous investigations suggested that groin pain accounts for up to 13% of football injuries (Ekstrand and Gillquist, 1983; Emery and Meeuwisse, 2001; Seward et al., 1993) and a key risk factor

was considered as repetitive high-intensity change of direction such as cutting actions (Malliaras et al., 2009; Thorborg et al., 2018; Malliaras and O'Neill, 2017). In young footballers, proximal enthesopathy of the rectus femoris was also common. Since these players are still in the growing phase, tendon pathology at this site can be directly linked to traction epiphysitis at the antero-inferior iliac spine (Simpson et al., 2016; Cassel et al., 2015; Mersmann et al., 2017).

Moreover, regarding incidence in relation to the sport practiced, the highest incidence of Achilles and patellar tendinopathy was in basketball, likely because of the repetitive jumping, change of direction and sprinting demands of basketball. The ankle is another commonly affected region in basketball players, particularly the peroneal tendons and the posterior tibialis tendon. These findings are consistent with previous studies among basketball players (Drakos et al., 2010) that found that lateral ankle sprains were the most frequent orthopaedic injuries (13.2% of all injuries).

It is interesting to note that handball was the sport with the highest incidence of upper limb tendinopathies, particularly at the shoulder, probably because of the high velocity repetitive throwing motions that occurs in upper extremities. According to one study, shoulder flexion angular velocity in handball throwing motion may occur as fast as 150 - 550 degrees/second, (Wagner et al., 2014) and previous studies have also reported a high prevalence/incidence of shoulder tendinopathy in handball (Giroto et al., 2017).

One of the clinically challenging issue of assessing the tendinopathies in competitive club sports is the fact athletes still participate in their sports with pain, which did not require TL from their practices and competitions. The athletes themselves often tolerate the discomfort induced by tendinopathies, and they seek a consult from medical service only when the discomfort intensifies and becomes too pain to play (Rio et al., 2015). In our study the incidence of tendinopathy that did not result in lost playing or training time was 18.9 cases per 100 players per season (95%CI: 17.4-20.6), which was almost double the incidence of injuries that resulted in lost time playing (10.7, 95%CI: 9.5-12.00). However, recent evidence from elite Australian rules football indicates that even if players continue to compete, their performance is adversely affected (Docking et al., 2018) Another study also reported that patellar tendon abnormality was found by ultrasound examination; however, competitive athletes rated themselves "asymptomatic." Those evidence indicates that performance level relative to tendinopathy symptoms should be assessed more carefully in order to examine the full impact of injuries (Rio et al., 2015; Clarsen et al., 2013).

Regarding time to RTP, the longest median RTP was found with adductor tendinopathies, with a significant proportion of severe cases with long RTP (Figure 2). Most cases of adductor tendinopathy are associated with adductor- or pubic-related groin pain, so this longer time in RTP may be related to pubic or groin involvement, especially in football players. Another interesting finding in the analysis of RTP, the greatest variability in RTP was observed in cases of patellar and Achilles tendinopathy (Rudavsky and

Cook, 2014). Collectively, those findings suggest that each tendinopathy case is unique and requires individualized treatment plans.

### Limitations and strengths

A possible limitation of this study was that we only studied athletes from one club, so our results might not be generalizable to other sports environments with different training or monitoring methods. Furthermore, athletes included in this dataset consisted of professional players and young athletes who were scouted by the study institution. Thus, the current results may be only applicable to elite athletes.

On the other hand, the aforementioned limitations of this study can be considered as strengths. Because the current study was performed by one institution, data collection method was consistent during the study period. Additionally, training and competition schedules were well tracked, and playing surface was the same across all sports and both levels. Moreover, the current study consisted of an 8-year of longitudinal data.

### Perspectives

We analysed 843 episodes of tendinopathy among youth and adult athletes from five sports at FCB. Approximately one in every five injuries over an 8-year period was diagnosed as a tendinopathy, signifying that this injury category is a significant issue in elite sport. The highest incidence of tendinopathy was in basketball and roller hockey, and the most common sites of injury were the patellar and Achilles tendons. However, only about one in every three injuries resulted in significant time-loss, and the time loss was infrequently, and the TL ranged from 1 to 2 weeks. Findings of this study suggested that athletes are, for the most part, able to continue to play with tendinopathies. Future work should investigate the impact of tendinopathies on player and team performance to elucidate the full impact of these injuries.

### Conclusion

Our study found that tendinopathies was commonly diagnosed injury/condition in FCB professional and youth level athletes. They were more common among professional players than youth players, and also more prevalent among indoor sports players than outdoor sports players. Approximately, 30% of all tendinopathies in professional players result in time loss. These data make an important contribution to understanding the magnitude of the problem and designing specific preventive and directed strategies according to sport, age, and playing surface.

### Acknowledgements

The experiments comply with the current laws of the country in which they were performed. The authors have no conflicts of interests to declare.

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### Key points

- The incidence of higher in indoor sports especially in professional basketball followed by professional roller hockey, and professional futsal.
- The longest time to RTP were associated with tendinopathy of the adductor longus (probably related with groin pain pathology).
- Most common tendinopathies, patellar and Achilles, demonstrated considerable variability in their RTP time according to sport.
- Tendinopathies represent a significant number of injuries in team sports and are more common in professional than youth teams, especially basketball and roller hockey.
- 30% of all tendinopathies in professional players result in time loss.

### ✉ Martí Casals

Medical Department, Futbol Club Barcelona, Barça Innovation Hub, Spain

### AUTHOR BIOGRAPHY

#### Daniel FLORIT

##### Employment

Medical Department, Futbol Club Barcelona, Barça Innovation Hub, Spain

##### Degree

MD

##### Research interest

Sport and exercise medicine, injury prevention, Muscle injuries

**E-mail:** daniel.florit@fcbarcelona.cat

#### Carles PEDRET

##### Employment

Sports Medicine and Imaging Department, Clinica Creu Blanca, Barcelona, Spain. Ultrasonography Department, Clinica Diagonal, Esplugues de Llobregat, Spain

##### Degree

MD, PhD

##### Research interest

Sport and exercise medicine, injury prevention, Muscle injuries

**E-mail:** carles@carlespedret.com

#### Martí CASALS

##### Employment

Biostatistician of the University of Vic – Central University of Catalonia (UVic-UCC), and Medical Department, Futbol Club Barcelona, Barcelona, Spain

##### Degree

PhD Biostatistics, MS

##### Research interest

Injury prevention, Sports medicine and Sports biostatistics

**E-mail:** marticasals@gmail.com

#### Peter MALLIARAS

##### Employment

Department of Physiotherapy, School of Primary and Allied Health Care, Monash University, Australia.

##### Degree

MD, PhD

##### Research interest

Sport and exercise medicine, injury prevention, Muscle injuries

**E-mail:** peter@completesportscare.com.au

#### Dai SUGIMOTO

##### Employment

Micheli Center for Sports Injury Prevention, Division of Sports Medicine, Department of Orthopedics, Boston Children's Hospital

##### Degree

PhD

##### Research interests

Sports injury prevention

**E-mail:** dai.sugimoto@childrens.harvard.edu

#### Gil RODAS

##### Employment

Medical Department, Futbol Club Barcelona, Barça Innovation Hub, Spain. Sports Medicine Department. Clinic hospital /Sant Joan de Deu Hospital, Barcelona, Spain

##### Degree

MD, PhD

##### Research interest

Sport and exercise medicine, injury prevention, Muscle injuries

**E-mail:** gil.rodas@fcbarcelona.cat