

Special Section: Summaries of Presentations from the Wrestling Medicine Conference & Wrestling Team Physician Course, United World Wrestling, Budapest, October 24-26, 2019

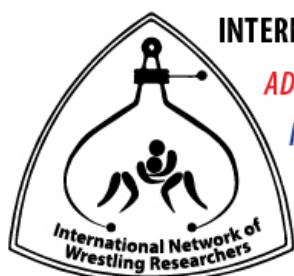
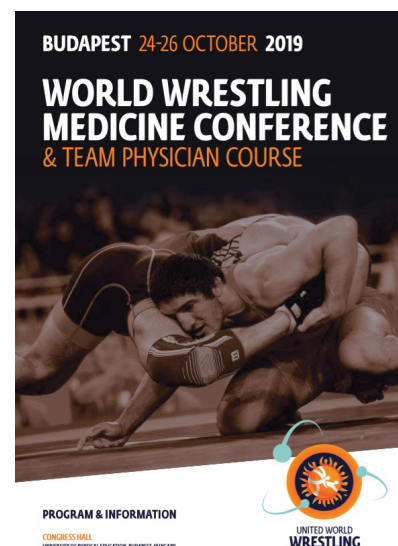
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CAULIFLOWER EAR AMONG FINNISH HIGH-LEVEL MALE WRESTLERS AND JUDOKA

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AIM OF THE STUDY

To study the prevalence, concerns, and treatment practices related to cauliflower ear among Finnish wrestlers and judokas.

BACKGROUND

- Cauliflower ear is an acquired deformity of the auricle caused by trauma
- Prevalence among wrestlers 39% - 44%
- Haematoma between perichondrium and auricular cartilage results in cartilage necrosis followed by fibroneocartilage formation
Schuller Arch Otolaryngol Head Neck Surg 1989; Kordi RJ Sports Sci Med. 2007

Cauliflower ear may cause:

- aesthetic discomfort
- ear canal obstruction may cause cerumen accumulation
- external ear infections and even hearing loss.

Haematomas should be evacuated promptly to avoid formation of cauliflower ear. Treatment options are aspiration or incision with post-drainage interventions such as suturing, dressings or splints to prevent the re-accumulation of the haematoma. Protective headgear is suggested to reduce the occurrence of cauliflower ear.

METHODS

32 Finnish wrestlers and 31 judokas completed a questionnaire at training sessions or at competition

Participants were adults competing at the national or international levels

Lateral digital photographs of participants' ears were taken

A senior author graded the overall appearance of the auricles on a scale from 0 to 5 (0 = normal auricle, 5 = extreme cauliflower ear).



RESULTS

Demographics

	All (n = 63)		Wrestlers (n = 32)		Judokas (n = 31)	
Mean age	22.2 (±4.7)		22.7 (±5.0)		21.6 (±4.3)	
Years of training	14.6 (±3.8)		15.1 (±3.5)		14.0 (±4.0)	
Women	13%	8/63	3%	1/32	23%	7/31
Cauliflower ear	73%	46/63	88%	28/32	58%	18/31
Unilateral cauliflower ear	29%	18/63	38%	12/32	19%	6/31
Bilateral cauliflower ear	44%	28/63	50%	16/32	39%	12/31

Use of headgear, treatment of auricular haematoma and attitude towards cauliflower ear

	Male wrestlers with cauliflower (n = 28)		Male judokas with cauliflower ear (n = 18)		Males without cauliflower ear (n = 9)		All females (n = 8)	
Occasional use of headgear	11%	3/28	50%	9/18	17%	1/6	20%	1/5
Treatment for auricular haematoma	100%	28/28	89%	16/18	11%	1/9	0%	0/8
Treatment by a doctor	54%	15/28	61%	11/18	0%	0/9	0%	0/8
Would recommend treatment	46%	13/28	56%	10/18	40%	2/5	88%	7/8
Would recommend use of headgear	21%	6/28	50%	9/18	20%	1/5	75%	6/8
Views cauliflower ear as a desirable deformity	43%	12/28	39%	7/18	20%	1/5	0%	0/8
Aesthetic disadvantage	0%	0/28	0%	0/18	20%	1/5	13%	1/8

Cauliflower ear was more prevalent among male athletes (84%, 46/55) than female athletes (0%, 0/8, $P < 0.001$). Almost all (96%) had sought treatment for an auricular hematoma. The most prevalent treatment modality was needle aspiration (96%). 76% had received treatment from individuals not representing healthcare profession. No complications from treatment were reported. Almost all participants (96%) reported some symptom from the cauliflower ear, typically pain. None regretted their cauliflower ear(s), and 41% of athletes with cauliflower ear considered it desirable.

CONCLUSIONS

Cauliflower ear is a common and symptomatic deformity among high-level Finnish wrestlers and judokas. Despite the symptoms, it is accepted and sometimes even desired among the athletes.