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Ski injuries of dizin ski slope infirmary patients during skiing season of 2008-2009

Amir Hossein Khalilifar[1], **Mohammad Hassan Kazemi**[2] and **Arya Hamedanchi** [3]

[1] *Iran Triathlon Federation, Iran*

[2] *University of Social Welfare and Rehabilitation Sciences, Iran*

[3]*University of Social Welfare and Rehabilitation Sciences, Iran*

Key words

Skiing, Wounds and Injuries, Dizin Ski Resort

Abstract

Skiing is one of the more well known winter sports which may cause wounds. The target of this examination was to distinguish the most well-known kinds of wounds in Iran's biggest ski resort. This cross-sectional unmistakable examination was performed on 1233 of patients admitted to the Dizin Resort Infirmary in 2008-2009. Acquired information included age, sex, injury type and clinical intercessions. All information were investigated by SPSS 16.0 programming.

Results indicated that 75% of the patients were male and 25% female. The mean age was seen as 27.86 (± 9.95) years. Most patients were between 20-29 years of age (55.2%). The most well-known injury was knee injury (14.4%). Other normal wounds were delicate tissue injury (12.1%), shoulder injury (8.1%), head and face injury (7%) and wrist injury (5.5%) individually. There was a critical connection among age and sex for example the age in ladies was not as much as men's ($P < 0.001$). We found a connection among age and injury type. The most minimal mean age (24.83) was accounted for in the patients with head and face wounds and the most noteworthy mean age (44.5) was in the patients with malleolus break ($P < 0.001$). Also, sex and knee injury end up being associated with more predominance in ladies ($P = 0.001$). There was likewise a huge connection among sex and shoulder wounds indicating a higher commonness in men ($P = 0.015$).

The historical backdrop of skiing goes back a great many years. The most established ski was found in Russia, going back 5000-6300 BC(1). A huge number of individuals on the planet go skiing each year. Physical exercises are significant pieces of life in present day social orders, and wounds definitely happen in physical activities and rivalries (2). Skiing may cause wounds in competitors too. Some hazard factors in skiing include: High speed, hitting different skiers or snags, injury brought about by ski hardware to the body or to other people and unexpected developments which cause strong strain or colossal weight on the joints (3, 4).

The Dizin resort is that the main hotel in Iran to convey formal rivalries, affirmed by the International Ski Federation. Dizin is found inside the northern heaps of Tehran in Gajereh. The most reduced a piece of Dizin is 2650 m and thusly the most noteworthy part is 3600 m above water level . The ski season in Dizin is longer than different hotels in Iran beginning in November and closure in May (5).

2. Destinations

The goal of this investigation was to recognize the premier regular wounds inside the biggest retreat in Iran. Given that no comparable examination has been led in Iran yet, the data can help doctors just as salvage groups to offer better types of assistance for harmed skiers.

3. Materials and Methods

This investigation surveyed 1223 patients during the ski period of 2008-2009. In this exploration, information were recorded by paramedics or doctors at the Dizin Infirmary. All rehearsing doctors were orthopedic Surgeons or GPs who had passed the global seminar on ski medication. Patients with undefined protests were rejected from the examination. The information included: age, sex, boss consistent or injury types and clinical mediations. All information were examined by SPSS16 utilizing Kolmogrov-Smirnov, Mann-Whitney, Kruscal-Wallis, Chi-Square and Fisher Exact tests.

4. Results

Guys involved 75% of the cases and 25% of the cases were females. The mean age was 27.86 (± 9.5). The most youthful patient was 6 years of age and the most established was 73 years of age; 1.1% of the patients were more youthful than 10 years of age; 13% were between 10-19 years of age; 55.2% were 20 to 29; 16.7% of patients were somewhere in the range of 30 and 39 years of age; 8.4% of patients were between 40 to 49 years of age; 5.2% of patients were between 50 to 59 years of age ;0.2% of patients were between 60 to 69 and 0.2% of patients were over 70 years of age.

The biggest gathering ran between 20-29 years of age (679 patients) and in this manner the littlest gatherings were individuals between 60-69 years or more (2 patients). The most widely recognized boss grievance among the patients of the crisis room was their ailment they had (33.8%). The most incessant injury was knee injury (14.4%). Individually, delicate tissue injury (12.1%), shoulder injury (8.1%) and head and neck injury (7%) were the third to fifth regular reasons for alluding to the crisis room; 33.1% of the patients got just a pain relieving or calming drug. Wrap or support was utilized for 22.7% of the patients; 9.6% of the patients got different sorts of medications; in 9.2% of the cases no treatment was required.

There was a noteworthy connection among sex and age, showing that the mean age in females is lower than the mean age in guys ($P < 0.001$). The outcomes likewise showed a connection among age and the sort of injury ($P < 0.001$). The most reduced mean age was 24.83 years which was seen inside the patients with head and neck injury and along these lines the most noteworthy mean age was 44.5 years which was seen inside the patients with lower leg crack (Table 1).

Causes	Mean Age	Number of patients	SD
Medical conditions	31.12	394	10.997
Toe trauma	25.89	9	9.943
Ankle trauma	25.26	43	5.113
Shin trauma	25.17	35	6.586
Knee trauma	26.25	167	7.992
Thigh trauma	29	8	11.032
Pelvic trauma	25.75	4	4.031
Abdominal trauma	25	5	3.464
Backbone trauma	26.41	17	8.375
Chest trauma	25.33	9	8
Shoulder trauma	26.06	95	7.537
Arm Trauma	25.62	13	9.403
Elbow trauma	26.5	30	10.281
Forearm trauma	27.58	12	9.405
Wrist trauma	24.84	64	9.585
Finger trauma	28.88	26	11.19
Neck trauma	30.09	11	8.86
Head & face trauma	24.83	82	9.388
Ankle fracture	44.5	2	3.536
Soft tissue trauma	27.3	142	10.322
Total	**27.9**	**1148**	**9.893**

Based on the results, there was a significant relationship between knee trauma and sex. Specifically knee trauma was more common in women compared to men ($P < 0.001$). Moreover, there was also a big relationship between sex and shoulder trauma which was statistically more common in men ($P = 0.015$, Table 2).

Type of injury	Female	Male
Medical conditions	74	320
Toe trauma	3	6
Ankle trauma	14	29
Shin trauma	10	24
Knee trauma	61	107
Thigh trauma	4	4
Pelvic trauma	2	2
Abdominal trauma	3	2
Backbone trauma	5	12
Chest trauma	1	8
Shoulder trauma	14	81
Arm Trauma	7	6
Elbow trauma	8	22
Forearm trauma	2	9
Wrist trauma	20	44
Finger trauma	6	20
Neck trauma	7	4
Head & face trauma	23	59
Ankle fracture	1	1
Soft tissue trauma	28	114
Total	**293**	**874**

5. Conversation

In view of the consequences of our investigation, the most well-known injury was individually: knee injury, delicate tissue injury, shoulder injury, head and neck injury and wrist injury. Longrom et al. in Scotland led a case-control concentrate in ski period of 1999-2000 on 674 harmed skiers and 336 non-harmed people; 58.9% of harmed patients were male and 41.1% were female. In contrast to our discoveries, there was no noteworthy connection among sex and injury. The most widely recognized wounds were in the age gathering of more youthful than 16 years. Furthermore, age had a major relationship with injury ($P = 0.001$); 12.5% of the harmed had breaks, 51.7% had hyper-extends, 9.6% had gashes, 2.7% had joint separation, and 23.5% different wounds (6). Scaffolds et al. in eastern Colorado directed a case arrangement concentrate on 1332 harmed skiers. The mean age was 29.3 (±17.2). In that review, the frequency of injury in men was higher than that of ladies (OR=1.061). Also, the most well-known injury among skiers was knee injury which coordinates our discoveries (7).

As certain kinds of wounds happen in a particular sex or age gathering, wellbeing insurances are increasingly significant for them. For instance, utilizing wellbeing protective caps can assume an essential job in counteraction of injury inside the lower ages and security precautionary measures for avoidance of lower leg crack inside the more established skiers are significant. It is likewise prescribed to utilize knee supports to forestall injury in ladies. Having considered the recurrence of wounds brought about by skiing, more accentuation on the preventive strategies is basic. Giving satisfactory preparing by ski educators and a weight on heating up before skiing can help diminish such wounds

6. References

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