

Emergency treatment of sports injuries: an epidemiologic study

RAUL PABLO GARRIDO CHAMORRO, JUAN PÉREZ SAN ROQUE, MARTA GONZÁLEZ LORENZO, SANTIAGO DIÉGUEZ ZARAGOZA, ROGELIO PASTOR CESTEROS, LUIS LÓPEZ-ANDÚJAR AGUIRIANO, PERE LLORENS SORIANO

Emergency Dept., General University Hospital of Alicante, Spain.

CORRESPONDENCE:

Raúl Pablo Garrido Chamorro
Avenida Pintor Xavier Soler, 1
Portal A, 9º F
03015 Alicante
Email: raulpablo@terra.es

DATE OF RECEIPT:

15-11-2007

DATE OF ACCEPTANCE:

19-6-2008

CONFLICT OF INTEREST:

None

Objectives: To analyze epidemiologic patterns related to the treatment of sports-related injuries and the impact these injuries have on a hospital emergency department's caseload.

Methods: We carried out a prospective observational study to describe 2000 sports injuries treated consecutively over a period of 4 years. The variables studied were age, gender, sport, type of injury, location of injury, treatment provided in the hospital emergency department, and destination at discharge from the department.

Results: Most sports lesions were in males (85%). The mean (SD) age of all sports-injured patients was 25.99 (10) years. Football (soccer) caused the largest proportion of injuries (49.5%) and was followed by cycling (9.5%) and basketball (8.7%). Most injuries involved a lower limb (56%). Bruises accounted for 33.8% of the caseload and ligament injuries for 30.1%. Orthopedic treatment was applied in 79.2% of the cases. Ninety-two percent of the injuries were treated inside the emergency department. When patients required hospitalization, the admitting department was usually traumatology (64%).

Conclusions: The patient who seeks treatment for a sports injury in our practice area is usually male and around 25 years of age. The injury, usually bruising of a lower limb, is generally resolved by emergency department staff without assistance from other departments. The elevated incidence of sports injuries, require orthopedic treatment in young persons should be taken into consideration given the social and employment-related repercussions. [Emergencias 2009;21:5-11]

Key words: Sports. Emergency health services. Injuries.

Introduction

Both amateur and high performance sporting activity involves the risk of injury¹. Systematically recommended by health promotion campaigns, and considered necessary for the maintenance of healthy habits, this activity is accepted as possibly entailing harm, both personal and social, since it may result in a certain percentage of the causes of professional absenteeism. Using data from our Hospital Emergency Department (ED), we analyzed the characteristics of sports injuries attended during 4 years to determine their impact and possible relevance.

Method

We performed a prospective, descriptive

study of 2,000 consecutive sports injuries attended in the traumatology area of our ED at a busy third level reference hospital, recorded between April 2003 and April 2007 in patients over 14 years of age (paediatric ED cases were excluded). A sports injury was defined as any injury derived from any sporting activity leading to a visit to our ED. The variables studied were: sport, gender, age, type of injury, treatment indicated and subsequent destination. The sports were classified according to their dynamic and static components (Table 1) following the classification proposed by Mitchell in 1994². For the analysis, certain sports were grouped together: gymnastics (activities in gymnasiums, such as: aerobic, body-building, spinning etc), motorized sports (jet-ski, flying sport, car rally and motorcycling), and physical combat sports (such as judo, karate, boxing,

Table 1. Classification of sports according to static or dynamic component

Variables	Low dynamic	Moderate dynamic	High dynamic
Low static	Billiards Bowls Golf Shooting	Baseball <i>Softball</i> Table tennis Tennis (doubles) Volleyball	Badminton Distance skiing (classical) Hockey (outdoor) Orientation Race walking Athletics (distance) Squash Tennis
Moderate Static	Archery Motor racing Diving Horse-riding Motorcycling	Fencing Athletics (jumping) Ice-skating American football <i>Rugby</i> Athletics (Sprint) Surfing Synchronised swimming	Basketball Ice hockey Cross skiing (skating) Athletics (middle distance running) Swimming Handball Football Boxing
High static	<i>Bobsleigh</i> Athletics (shot-put) Gymnastics Karate/judo Sailing Climbing Water skiing Weight lifting <i>Windsurfing</i>	Body building Alpine skiing Wrestling	Canoeing Cycling Athletics (decathlon) Rowing Speed skating

taikwondo, kickboxing, wrestling etc). The remaining sports were analysed independently, including football, cycling, basketball, tennis etc.). Injuries were classified according to anatomical location, with six categories: lower limbs (LL; injuries produced anywhere between the most distal part of the toes and the lower edge of the inguinal and gluteal folds), upper limbs (UL; injuries produced between the most distal part of the fingers and the lower edge of the axillary folds), trunk (injuries produced between the inferior edge of the supraclavicular hollow and the superior edge of the inguinal and gluteal folds, laterally limited by the superior axillary folds), neck (injuries produced between the superior edge of the supraclavicular hollow and an imaginary line joining the point of the chin and the occipital point), the skull (injuries produced above that imaginary line), and polyinjury when more than one of the above categories was affected).

With respect to the type of injuries, we established eight subcategories: visceral (injuries to internal chest or abdominal tissue or intracranial injury), fractures (open or closed and all the associated sub-lesions), dislocations (considered as loss of anatomic joint integrity and all the associated sub lesions except fractures), wounds (broken skin, with or without deeper layer involvement), tendon disorders (acute or

chronic inflammation, partial or complete rupture), ligament disorders (painful, sensitive to palpation and/or physical examination), muscular (encompassing muscle tear, contracture and late-onset muscle pain), and contusion (impact without evidence of osteo-muscular repercussion).

Treatment administered in ED was classified in three categories: surgical (patients requiring stitches), orthopaedic (patients requiring immobilization with tape, splint, bandage or other), and symptomatic (patients only requiring medical treatment).

The study population consisted entirely of patients attended in the traumatology area of our ED at the General University Hospital of Alicante, a third level reference hospital for the majority of medical specialities in our province. It has 800 beds and receives 350 ED visits a day, of which 28% are for injuries. The hospital serves a rural and urban population of 228,905 people of which 111,642 (48.76%) are male and 117,245 (51.24%) are female. Emergencies are attended in two distinct areas – one medical and the other orthopaedic – by ED physicians. Those patients requiring admission or specialized attention are examined by specialists in orthopaedic surgery and traumatology.

A specific data base sheet was used in this study, and statistical analysis was performed

using SPSS 11.01, with 95% confidence intervals.

Results

Mean age of the 2,000 patients with injuries was 26 ± 10 years (CI 95%: 23.8-24.3), of whom 89.2% were male (mean age 26 ± 10 years; CI 95%: 25.6-26.5) and 10.8% were women (mean age 25.3 ± 10.2 years; CI 95%: 24-26.7). As age increased, the number of sports injuries attended decreased (Figure 1). The majority of injuries were produced in sports with high dynamic and moderate static components (67.5%), including football, basketball and athletics (Table 2). In addition, we observed higher percentages of sports injuries in sports with high dynamic and high static components; the incidence of such injuries in sports with moderate or low components was much lower.

Overall, the most frequent injuries were LL, followed by UL, as shown in Table 3. Regarding type of injury,

contusions and fractures predominated in UL, while tendon, ligament and muscle injuries were more frequent in LL. Wounds and visceral lesions predominated in the head; importantly, up to 5% of cranial injuries had encephalic involvement requiring hospital admission (in addition, cranial injuries constituted 63.1% of all visceral injuries).

Table 4 shows the percentage of anatomic injury according to type of sport. We analyzed the 11 most frequent sports in our study. Patients mainly consulted for injuries produced playing football, followed to a much lesser extent by cycling, basketball, athletics, indoor fo-

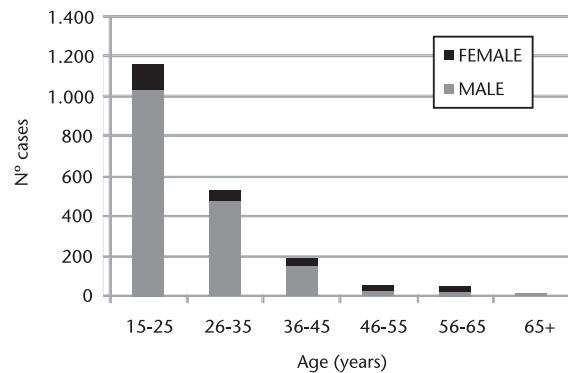


Figure 1. Distribution of sexes by age groups (absolute values).

otball and gymnastics. Injuries due to football were found in all anatomic categories except in that considered poly-injury. Cycling accounted for 80% of poly-injury, with motorized sports making up the remaining 20%. A salient finding was the high incidence of neck injuries produced during gymnastic activity, reaching the same percentage as neck injury due to football, despite the fact of much lower participation (4% versus 49%).

The analysis of sports showed that LL injuries predominated in football, poly-injury in cycling, and neck injuries (secondary to muscular contraction) in basketball, athletics, gymnastics and skiing). Indoor football had more trunk injuries and motor sports more poly-injury. Except for the categories of visceral injuries and wounds (produced in cycling accidents), football accidents produced the greatest percentage of injuries. In basketball, the most frequent injuries were visceral (produced in falls from the hoop due to poor fixation in non-professionally installed courts), while in athletics and gymnastics, the predominant injuries were muscular and tendon disorders.

Analysis of hospital admissions (Table 5) according to type of sporting injury, we observed that 7% of all injuries required admission, 100% in the case of visceral followed by 27% for fractures and

Table 2. Frequency of injuries according to type of sport

Variables	Low dynamic	Moderate dynamic	High dynamic
Low static	0.4%	1.9%	5.3%
Moderate static	1.8%	1.4%	67.5%
High static	7.1%	4.5%	10.1%

Table 3. Distribution of the type of injury according to localization

	Contusion	Ligament	Fracture	Muscular	Tendon	Wound	Dislocation	Visceral	Total n (%)
LL	209	625	119	113	45	17	13	0	1,141 (57%)
UL	268	13	168	7	29	4	45	0	534 (26.7%)
Trunk	121	0	17	31	0	3	0	6	178 (8.9%)
Head	46	0	16	0	0	36	0	12	110 (5.5%)
Neck	2	0	3	26	0	1	0	0	32 (1.6%)
Poly-injury	1	0	0	0	0	3	0	1	5 (0.2%)
TOTAL	647 (32.4%)	638 (31.9%)	323 (16.2%)	177 (8.8%)	74 (3.7%)	64 (3.2%)	58 (2.9%)	19 (0.9%)	2,000 (100%)

LL: Lower limbs; UL: upper limbs.

Table 4. Percentage of injuries according to sport

	Football (n = 990)	Cycling (n = 190)	Basketball (n = 174)	Athletics (n = 84)	Indoor football (n = 82)	Gymnastics (n = 80)	Skiing (n = 70)	Tennis (n = 46)	Wrestling (n = 54)	Volleyball (n = 36)	Motor (n = 26)	Other (n = 168)
Localization of injury (%)												
LL (n = 1.141)	58.4	3.9	7.9	5.8	4.9	3.1	3.9	2.8	1.4	1.1	0.9	5.4
UL (n = 534)	42.3	16.8	9.9	1.8	1.8	3.7	2.9	1.6	4.4	3.2	1.8	9.8
Trunk (n = 178)	32.9	15.9	4.9	2.1	6.1	9.8	1.6	1.6	4.9	2.7	4.9	12.6
Head (n = 110)	36.3	29.1	6.4	–	3.6	0.9	0.9	1.8	3.6	–	2.8	14.6
Neck (n = 32)	21.8	2.1	15.5	12.1	–	21.8	12.1	–	–	–	2.1	12.4
Poly-injury (n = 5)	–	80.0	–	–	–	–	–	–	–	–	20.0	–
Type of injury (%)												
Contusion (n = 648)	50.8	13.4	8.1	1.2	4.1	2.0	2.0	0.9	4.6	2.6	1.5	8.8
Ligament (n = 638)	59.8	1.4	10.5	5.3	5.1	2.8	5.1	2.0	1.2	1.2	0.3	5.3
Fracture (n = 322)	43.6	16.4	8.1	2.0	3.4	2.4	4.3	0.6	1.5	0.3	3.1	13.9
Muscular (n = 177)	36.7	1.6	3.9	12.4	3.3	17.5	2.8	9.1	2.8	2.8	–	7.1
Tendon disorder (n = 74)	31.1	8.1	2.7	12.1	4.1	10.8	4.1	12.1	5.4	2.7	–	6.8
Wound (n = 64)	29.6	42.1	7.8	1.5	1.5	1.5	–	–	1.5	–	3.0	13.0
Dislocation (n = 58)	60.3	12.1	1.7	5.1	1.7	3.4	1.7	–	–	1.7	1.7	–
Visceral (n = 19)	21.1	41.1	15.7	–	–	–	–	–	–	–	5.2	16.9

LL: Lower limbs; UL: upper limbs.

12% for dislocations. Admission was necessary mainly for head injuries (35%), followed by poly-injury (20%).

Treatments administered in ED were primarily orthopaedic (79.2%), followed by symptomatic (17.7%) and then surgical (3.1%).

Table 5 shows the relevant hospital department admissions, globally and according to localization and injury type. The majority of these admissions were received by the department of orthopaedic surgery and traumatology (63%), followed by ED observation unit and the department of otorhinolaryngology (both 6%).

Discussion

The utility of evaluating sports injuries attended in our ED as compared with those attended at sporting events and competitions highlights important differences. The first difference is that the epidemiology of the injury reflects the customs and habits of the population attended, which dictate whether they do or play one or another sport and therefore the variety of risk and types of injuries. Thus for example, in our sample football players constituted 50% of all sporting injuries, higher than the 37% reported in other Spanish studies³. In Canada⁴, 25.6% of sports injuries are due to skiing accidents, while in our study area there are no ski resorts and only 3.5% were produced skiing, although this activity accounts for up to 16.4% of sports injuries in other regions of Spain³. In Australia⁵, cycling accounts for the greatest proportion (26.2%) of sporting injuries,

followed by Australian football (11.3%) and skating (6.5%).

The second difference arises from the population studied, mainly amateur, because professional sportsmen and women are covered by sport health insurance and are therefore attended in other health centres, generally private. The population influences the type of injury, and amateur sport-injury studies differ from studies based on professionals, due to differences in intensity of sporting activity and physical preparation (that of the professional being very different from that of the amateur). In basketball the incidence of LL injury in the Spanish League ACB is 46%, while in the North American NBA (with greater intensity of play and physical demands) it reaches 57%⁶, similar to the figures for amateur players in our setting (between 45%³ and 55%⁷).

As in other studies⁸, men were more likely to suffer injuries than women: one study reported a male/female proportion of 7/3. This reflects social factors – more men engage in sporting activity than women, and the static and dynamic components of male sport are higher, so the incidence of injury is clearly higher. In addition, men more frequently engage in sports involving contact with adversaries, which again increases the probability of injuries. Two out of every three injuries are produced in team sports¹⁰, mostly played by men.

With respect to the age of the study population, as in other studies, injuries are produced more frequently in the age groups 21-30 years¹¹ and 15-25¹² years. Thus, over 22% of young-

Table 5. Hospital admissions according to localization and type of injury

Localization (% requiring admission)	Destination (hospital department)
LL (3.06%)	
OST	100%
UL (8.23%)	
OST	100%
Heat (35.45%)	
Observation	23.1%
Otorhinolaryngology	23.1%
Plastic surgery	12.8%
Ophthalmology	10.3%
Neurosurgery	10.3%
Maxillofacial	10.3%
ICU	7.6%
Exitus	2.5%
Neck (9.37%)	
ICU	66.6%
OST	33.3%
Trunk (7.69%)	
OST	50%
Thoracic surgery	28.5%
Urología	14.2%
Cirugía General	7.1%
Polilésión (20%)	
UCI	100%
Type of injury (% requiring admission)	
Contusion (1.8%)	
ED Observation	81.8%
Otorhinolaryngology	9.1%
General Surgery	9.1%
Ligament (0.2%)	
OST	100%
Fracture (27.22%)	
OST	84.2%
Otorhino	7.8%
Maxillofacial	4.5%
ICU	2.3%
Neurosurgery	1.2%
Muscular (2.3%)	
OST	100%
Tendon disorder (8.2%)	
OST	100%
Wound (7.9%)	
Plastic surgery	100%
Dislocation (12.1%)	
OST	100%
Visceral (100%)	
ICU	26.3%
Thoracic surgery	21.1%
Ophthalmology	21.1%
Neurosurgery	15.7%
Urology	10.5%
Otorhinolaryngology	5.3%

LL: Lower limbs; UL: Upper limbs; OST: Orthopaedic Surgery and Traumatology; ICU: Intensive Care Unit.

ters aged 8-17 years suffer a sporting injury¹³. The rate of injury in athletics is 2.5-5.8 for every 1,000 hours of participation, lower in long-distance runners than sprinters¹⁴. Another factor influencing injuries is the prevailing conditions of the activity; open air activity or events and the sporting arena are subject to

weather. Rain or ice¹⁵ increases the number of knee and ankle injuries due to poor foot grip; twisted ankles are more frequently associated with wet conditions.

Injuries of the lower limbs represent more than 40% of all injuries¹⁶, and ankle injuries 30%¹⁷. Diverse studies on increased frequency in women have related this with hyperlaxity of the ligaments due to female hormonal conditions¹⁸. Ankle ligaments are most affected, according to the literature¹⁹. In our study, lower limb ligament injuries represented 55% of all these.

Football was the cause of half the injuries, similar to the 44.8% found by other authors²⁰. This means an incidence of 4.1 injuries per 1,000 hours of football activity²¹, mostly occurring in the distal parts of the body²², such as feet and ankles. The reasons for increased distal injuries are due to intrinsic characteristics of the sport and frequent player-to-player contact²³, often off-balance, producing contusions and eversion, inversion or rotation that condition the injuries.

Seven and a half percent of our population required hospital admission, which is higher than the 3.8% found in other studies²⁴. In women-only studies, this has been reported as (3.4%), possibly due to the lower dynamic component in sports played by women²⁵. In children, the incidence and severity of injuries is greater²⁶.

With respect to injury management, as in other studies²⁷, orthopaedic treatment was far more frequently applied than surgical. This aspect is notable for its repercussions for professional absenteeism, at best temporal.

The great majority of cases were resolved by our ED service without need for referral to other specialities. Considering the following data: 10-19%²⁸⁻³⁰ of all injuries treated by our ED orthopaedic unit are sports-related (our rate being closer to the lower figure), and 65%³¹ of all sports injuries are attended by EDs (representing 4.3 million visits a year in USA³¹ and costing 1 billion dollars a year in Australia³²), and 51%³³ of school injuries are due to sporting activity, it seems clear that ED physicians need to incorporate adequate diagnostic and therapeutic measures in their training, specifically oriented towards sports injuries.

A fundamental limitation of this study was the impossibility of determining the real number of people engaging in occasional sporting activity in our area, so it is limited to being a descriptive study of ED attendance. Secondly, not being a multi-centre study, it is subject to the sociological particularities of the study population. The fact

that football is the most popular participant sport in our country explains its high percentage of injuries and therefore introduces a bias in the data impeding comparison with studies performed in other societies where other sports are more prevalent.

In conclusion, the typical pattern of sports injury attended by our ED is that of a young male footballer, with lower limb contusion, resolved by in-ED orthopaedic treatment. When hospital admission is necessary, the patient is treated orthopaedically. Given that 92% of sports injuries receive complete attention within the ED, we believe that specific training in the diagnosis and therapy of such injuries should be included in our speciality, to be able to attend these patients as effectively as possible and reduce the personal and social impact produced during both professional and amateur sporting activity.

References

- Romero, Hermes. Las lesiones y su relación con el Rendimiento Deportivo. PubliCE Standard. (revista electrónica) 07/11/2001. (consultado 23/10/2007) Disponible en: <http://www.sobrentrenamiento.com/PubliCE/Articulo.asp?ida=72&tp=s>
- Mitchell JH, Haskell WL, Raven PB. 26 Th Bethesda Conference. Classification of sport J Am Coll Cardiol 1994;24:864-6.
- Vilaray-Lorite F, Álvarez-Cueto B, Pérez-Villanueva N. Las lesiones deportivas atendidas en el área de urgencias. Emergencias 2005;17:243-50.
- Bridges EJ, Rouah F, Johnston KM. Snowblading injuries in Eastern Canada. Br J Sports Med 2003;37:511-5.
- Finch C, Valuri G, Ozanne-Smith J. Sport and active recreation injuries in Australia: evidence from emergency department presentations. Br J Sports Med 1998;32:220-5.
- Pedro Jorge Moraes Menezes. Lesiones en el baloncesto: epidemiología, patología, terapéutica y rehabilitación de las lesiones. Efdportes (revista electrónica) 2003;9(62) (consultado 23/10/2007) Disponible en: <http://www.efdeportes.com/efd62/balonc.htm>.
- Jiménez Díaz JF, Caballero Carmona A, Villa Vicente JG, Barriga Martín A. Novedades en Medicina y Traumatología del Deporte, Baloncesto. 1nd ed. Ed Quadrena: Toledo, 2006.
- Marante-Fuertes J, Barón-Pérez Y, Casas-Ruiz M, Cano-Gómez C. Lesiones en jugadores no profesionales de baloncesto. Estudio estadístico. Revista de la Sociedad Andaluza de Traumatología y Ortopedia 2002;22:86-91.
- Finch CF, Kenihan MAR. A profile of patients attending sports medicine clinics. Br J Sports Med 2001;35:251-6.
- Loes M. Medical treatment and costs of sports-related injuries in a total population. Int J Sports Med 1990;11:66-72.
- Salcedo-Joven A, Sánchez-González B, Carretero M. Esguince de tobillo. Valoración en Atención Primaria. Medicina Integral 2000;2:36.
- Bahr R, Holme I. Risk factors for sports injuries — a methodological approach. Br J Sports Med 2003;37:384-92.
- Backx FJG, Beijer HMJ, Bol E. Injuries in high risk persons and high risk sports: a longitudinal study of 1818 school children. Am J Sports Med 1991;19:124-30.
- Hamilton J. Understanding Running Injuries. NCSA Performance Training Journal 2000;8:11-7.
- Orchard JW, Powell JW. Risk of knee and ankle sprains under various weather conditions in American football. Med Sci Sports Exerc 2003;35:1118-23.
- Manoniellas P, Tárraga L. Epidemiología de las lesiones en el baloncesto. Arch Med Dep 1998;68:479-83.
- Soriano, A. Epidemiología de las lesiones traumáticas en baloncesto. En Lesiones Deportivas. XXII Symposium Internacional de Traumatología. Fundación Mapre Medicina 1996, p 65-66.
- Soderman K, Alfredson H, Pietila T, Werner S. Risk factors for leg injuries in female soccer players: a prospective investigation during one out-door season. Knee Surg Sports Traumatol Arthrosc 2001;9:313-21.
- Stormont DM, Morrey B, An K. Stability of the loaded ankle. Am J Sports Med 1985;13:295-7.
- Ytterstad B. The Harstad injury prevention study: the epidemiology of sports injuries. An 8 year study. Br J Sports Med 1996;30:64-8.
- Jorgensen U. Epidemiology of injuries in typical Scandinavian team sports. Br J Sports Med 1984;18:59-63.
- Garrido-Chamorro RP, Llorens-Soriano P, González-Lorenzo M, Pérez-San Roque J. Lesiones deportivas en futbolistas alicantinos. Rev Trauma Dep 2004;3:43-6.
- Giza E, Fuller C, Junge A, Dvorak J. Mechanisms of foot and ankle injuries in soccer. Am J Sports Med 2003;31:550-4.
- Tursz A, Crost M. Sports related injuries in children. A study of their characteristics, frequency and severity, with comparison of other types of accidental injuries. Am J Sports Med 1986;14:294-9.
- Garrido-Chamorro RP, González-Lorenzo M, Pérez-San Roque J, Castello-Carbonell C, Llorens-Soriano P. Atención urgente de las lesiones deportivas en mujeres. Efdportes (revista electrónica) 2005;10(85) (consultado 23/10/2007) Disponible en: <http://www.efdeportes.com/efd85/lesiones.htm>
- Caine D, Caine C, Maffulli N. Incidence and distribution of pediatric sport-related injuries. Clin J Sport Med 2006;16:500-13.
- McKay GD, Goldie PA, Payne WR, Oakes BW. Ankle injuries in basketball: injury rate and risk factors. Br J Sports Med 2001;35:103-8.
- Lindqvist KS, Timpka T, Bjurulf P. Injuries during leisure physical activity in a Swedish municipality. Scand J Soc Med 1996;24:282-92.
- Ytterstad B. The Harstad injury prevention study: the epidemiology of sports injuries. An 8 year study. Br J Sports Med 1996;30:64-8.
- Loes M. Medical treatment and costs of sports-related injuries in a total population. Int J Sports Med 1990;11:66-72.
- Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report: Non-fatal sports- and recreation-related injuries treated in emergency departments, United States, July 2000-June 2001. MMWR Weekly. 2002;51:736-9.
- Egger G. Sports injuries in Australia: causes, cost and prevention. Health Promotion Journal of Australia 1991;1:28-33.
- Abernethy L, MacAuley D. Impact of school sports injury. Br J Sports Med 2003;37:354-5.

Epidemiología de las lesiones deportivas atendidas en urgencias

Garrido Chamorro RP, Pérez San Roque J, González Lorenzo M, Dieguez Zaragoza S, Pastor Cesteros R, López-Andújar Aguiriano L, Llorens Soriano P

Objetivos: Analizar la epidemiología asistencial en la patología de causa deportiva y su impacto en el servicio de urgencias hospitalario (SUH).

Método: Estudio observacional, descriptivo y prospectivo, de 2.000 lesiones deportivas consecutivas atendidas en un SUH durante un periodo de 4 años. Las variables seleccionadas fueron: edad, género, actividad deportiva, tipo de lesión, localización de la lesión, tratamiento y destino tras la atención urgente.

Resultados: La mayoría de asistencias por lesiones deportivas se producen en varones (85%), con una edad media de 26 ± 10 años. El deporte que más lesiones aporta es el fútbol (49,5%), seguido del ciclismo (9,5%) y del baloncesto

(8,7%). La mayoría de las lesiones se localizan en el miembro inferior (56%), principalmente contusiones (33,8%) y lesiones ligamentosas (30,1%). La mayoría de los pacientes precisó tratamiento ortopédico (79,2%), el 92% de las atenciones fueron resueltas por el propio SUH. Cuando precisaron ingreso, éste se produjo principalmente en traumatología (64%).

Conclusiones: El paciente que consulta por lesión deportiva en nuestra área es un varón joven que sufre una contusión en el miembro inferior, recibe tratamiento ortopédico y es resuelto por el SUH sin intervención de otras especialidades. La elevada incidencia de lesiones deportivas, que conllevan tratamiento ortopédico, en personas jóvenes debe ser tenida en cuenta en relación con su repercusión socio-laboral. [Emergencias 2009;21:5-11]

Palabras clave: Deporte. Servicio de urgencias. Lesión.