



Figure 3 Photomicrograph shows plasma cell predominance, binucleated plasma cells are arrow marked (a, haematoxylin–eosin $\times 400$), immunoperoxidase staining shows positivity of plasma cells with IgG4, lymphocytes are negative for IgG4 (b, IgG4 $\times 400$).

or rituximab as the second- or third-line drugs. Long-term close follow-up is warranted to treat relapses and early identification of systemic involvement.

Conflict of interest

The authors declare no conflict of interest.

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Sir, Patterns of ocular injury from paintball trauma

Paintballs pose a significant risk for devastating ocular trauma.¹ ASTM International² regularly publishes eye protection standards for paintball, and guidelines from the National Professional Paintball League³ in the United States require that players exposed to shooting areas wear eye protection that meets these standards. ASTM International has updated their standards four times since 1999, most recently in 2012. To assess the impact of these guidelines, this study investigated the patterns of ocular paintball trauma that presented to US emergency departments (EDs) from 2001 to 2010.

The study received Institutional Review Board exemption from Rhode Island Hospital. Data were extracted from the National Electronic Injury Surveillance System (NEISS-CPSC) and reviewed for demographics, diagnosis, locale, and eye protection status.⁴ Patients were included if they visited an ED from 2001 to 2010 with an injury that (1) involved paintball equipment and (2) affected the eye. Weighted estimates were calculated using SAS version 9.1.2 (SAS Institute, Inc., Cary, NC, USA).

All statistical estimates represent weighted frequencies based on data from 100 representative US EDs. Of 11 827 paintball-related eye injuries from 2001 to 2010 (Table 1), most occurred in patients who were male (10 906; 92.2%) and aged 10–19 years (8055; 68.1%). The highest proportion of injuries occurred from 2001 to 2004 (13.7–15.2%). Of 1586 patients with eye protection data, 724 (45.6%) removed protection immediately before injury and 863 (54.4%) were not wearing protection.

This study found that ocular paintball injuries are decreasing over time but – despite clearly defined eye protection guidelines – remain a persistent challenge, especially in males and young patients. Several injuries were related to removing or not using eye protection. Moreover, similar proportions of injuries occurred at home and in commercial settings. This suggests the need

Table 1 Demographics and characteristics of patients with ocular paintball trauma in the United States from 2001 to 2010

Characteristic	Actual frequency; n = 333	National estimates (95% confidence interval); n = 11 827 ^a	Percentage of patients with ocular paintball injury
Gender			
Male	302	10 906 (9837–11 976)	92.2
Female	31	921 (490–1352) ^b	7.8
Age			
0–9 years	22	453 (156–750) ^b	3.8
10–19 years	228	8055 (7007–9102)	68.1
20–29 years	51	2138 (1464–2813)	18.1
≥ 30 years	32	1181 (675–1688) ^b	10.0
Race			
White	177	6947 (5892–8001)	58.7
Black/African American	27	665 (328–1003) ^b	5.6
Unknown	97	3295 (2510–4080)	27.9
Other	32	920 (497–1343) ^b	7.8
Coded diagnosis			
Contusions, abrasions	163	6081 (1074–7089)	51.4
Dermatitis, conjunctivitis	4	100 (0–229) ^b	0.8
Foreign body	6	208 (0–442) ^b	1.8
Hematoma	6	214 (0–428) ^b	1.8
Hemorrhage	18	360 (104–616) ^b	3.0
Internal injury	1	60 (0–180) ^b	0.5
Laceration	7	306 (30–582) ^b	2.6
Nerve damage	2	31 (0–73) ^b	0.3
Puncture	4	179 (0–400) ^b	1.5
Strain or sprain	2	85 (0–223) ^b	0.7
Other/not stated	120	4203 (3351–5055)	35.5
Locale			
Home	84	3262 (2451–4074)	27.6
Public property	17	596 (222–970) ^b	5.0
Recreation/sports venue	54	2635 (1872–3398)	22.3
Street/highway	2	22 (0–54) ^b	0.2
Not recorded	176	5312 (4415–6210)	44.9
Year of injury			
2001	41	1802 (1386–2218)	15.2
2002	40	1649 (1281–2016)	13.9
2003	50	1625 (1228–2021)	13.7
2004	49	1802 (1379–2225)	15.2
2005	40	1152 (810–1493) ^b	9.7
2006	40	1344 (960–1728)	11.4
2007	18	680 (404–956) ^b	5.7
2008	14	519 (263–776) ^b	4.4
2009	25	918 (640–1196) ^b	7.8
2010	16	336 (148–523) ^b	2.8

^a Weighted frequencies based on 100 representative emergency departments in the National Electronic Injury Surveillance System.

^b Estimates with frequencies <20, weighted frequencies <1200, and/or coefficient of variation >0.3 may not be statistically stable based on guidelines from the National Electronic Injury Surveillance System.

for further enforcement of eye protection protocols, regardless of locale.

The interpretation of the type and severity of injuries was limited by minimal ocular code-based data within NEISS-CPSC.⁴ In addition, the NEISS-CPSC did not include cases that presented outside of EDs.

In conclusion, additional strategies are needed to reduce the incidence of preventable paintball injuries, including placing age or licensure limitations on paintball equipment sales and better enforcement of eye protection requirements.

Conflict of interest

The authors declare no conflict of interest.

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Sir, Effect of intracameral phenylephrine on systemic blood pressure

A culture of caution pervades in the perioperative use of intracameral phenylephrine (I/C PE) for patients with cardiovascular comorbidities. We sought to assess its safety by investigating whether it confers any clinically significant cardiovascular effect, specifically on blood pressure.

Study

A prospective interventional study design was employed. Patients were included in the study whether or not they suffered from cardiovascular risk factors. Overall, 421 patients were administered 0.25 ml of I/C PE 2.5%, and blood pressure readings were taken before and