

Epidemiology, treatment (costs) and long-term outcomes of patients with fireworks-related injuries (ROCKET); a multicenter prospective observational case series

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Fireworks-related injuries have a substantial impact on the medical costs, but a much larger impact on the societal costs.

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON26638

Bron

Nationaal Trial Register

Verkorte titel

ROCKET

Aandoening

Fireworks-related injuries

Ondersteuning

Primaire sponsor: Erasmus MC, University Medical Center Rotterdam, Trauma Research Unit, Department of Surgery
Erasmus Medical Center, Medical Research Ethics Committee (MREC)

Overige ondersteuning: None

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Fireworks-related injury characteristics

Toelichting onderzoek

Achtergrond van het onderzoek

BACKGROUND

Fireworks-related injuries frequently occur in both adults and children. It often entails serious and avoidable injuries to innocent bystanders. Most injuries are non-fatal but a substantial amount results in life-long disabilities affecting quality of life and the use of public health services. Currently, reliable data about the affected patients, their injury characteristics, the direct and indirect costs resulting from their injury and the loss of quality of life outcomes in the long-term is lacking.

AIM

The primary aim of this study is to determine the injury characteristics of fireworks-related injuries in patients reporting to a hospital for treatment.

The secondary aims are:

- 1) To determine the number and type of operations needed due to fireworks-related injuries until one year after trauma
- 2) To determine the duration of hospital admission in these patients
- 3) To determine the direct medical costs and the indirect societal costs (incl. work absence) in these patients
- 4) To investigate the absence from school in these patients
- 5) To investigate the patient-reported outcomes in these patients

- EuroQol-5D (EQ-5D-3L)
- Health Utility Index Mark 3 (domains for vision and dexterity) (HUI-3)
- Quick Disabilities of the Arm, Shoulder and Hand (Quick-DASH)
- Cold Intolerance Symptoms Severity (CISS)
- Lower Extremity Functional Scale (LEFS)
- Patient and Observer Scar Assessment Scale (POSAS)
- Patient satisfaction with the functional recovery and cosmesis

6) To investigate how the injury changed patient's view on the use of fireworks

STUDY DESIGN

Multicenter, prospective, observational study (case series)

POPULATION

All patients (no age limit) with fireworks-related injuries presenting to a hospital in the period between December 1, 2017 and January 31, 2018 in the Trauma Region Southwest Netherlands.

INTERVENTION

Not applicable.

ENDPOINTS

Primary outcome measure: fireworks-related injury characteristics.

Secondary outcome measures: Number and type of operations; Duration of hospital admission; Direct medical and indirect societal costs; Absence from school; Quality of life (EuroQol-5D-3L; EQ-5D-3L); Health Utilities Index 3; HUI-3 (domains vision and dexterity); Visual acuity; Quick Disabilities of Arm, Shoulder and Hand (Quick-DASH); Cold Intolerance Severity Scale (CISS); Lower Extremity Functional Scale (LEFS); Patient and Observer Scar

Assessment Scale (POSAS); Patient satisfaction with their functional recovery and cosmesis;
How trauma has affected patient; –s view on the use of consumer fireworks.

RECRUITING COUNTRIES

The Netherlands.

Doel van het onderzoek

Fireworks-related injuries have a substantial impact on the medical costs, but a much larger impact on the societal costs.

Onderzoeksopzet

2 weeks, 3 months, 6 months, and 12 months after hospital presentation.

Onderzoeksproduct en/of interventie

Not applicable

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1) Patients with any injury caused by fireworks treated* in a hospital in the Trauma Region Southwest Netherlands between December 1, 2017 and January 31, 2018

2) Provision of informed consent

* Treatment is defined as any intervention for which ¡Y1 clinical follow-up visit is scheduled

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1) Patients who died within the first 24 hours due to other injuries than fireworks

2) Patients with incomplete or unknown contact information;

3) Insufficient understanding of Dutch or English to understand the study documents

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland
Status: Werving gestopt
(Verwachte) startdatum: 01-12-2017
Aantal proefpersonen: 75
Type: Werkelijke startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nee

Ethische beoordeling

Positief advies
Datum: 31-10-2017
Soort: Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL6608
NTR-old	NTR6793
Ander register	METC Erasmus MC : MEC-2017-1066 (METC Erasmus MC)

Resultaten

Samenvatting resultaten

Van Yperen DT, Van der Vlies CH, De Faber JTHN, Penders CJM, Smit X, Van Lieshout EMM, Verhofstad MHJ, ROCKET-Studiegroep .

[Firework injuries in the south-western region of the Netherlands around the turn of the year 2017-2018].

Ned Tijdschr Geneeskd. 2018 Nov 29;162