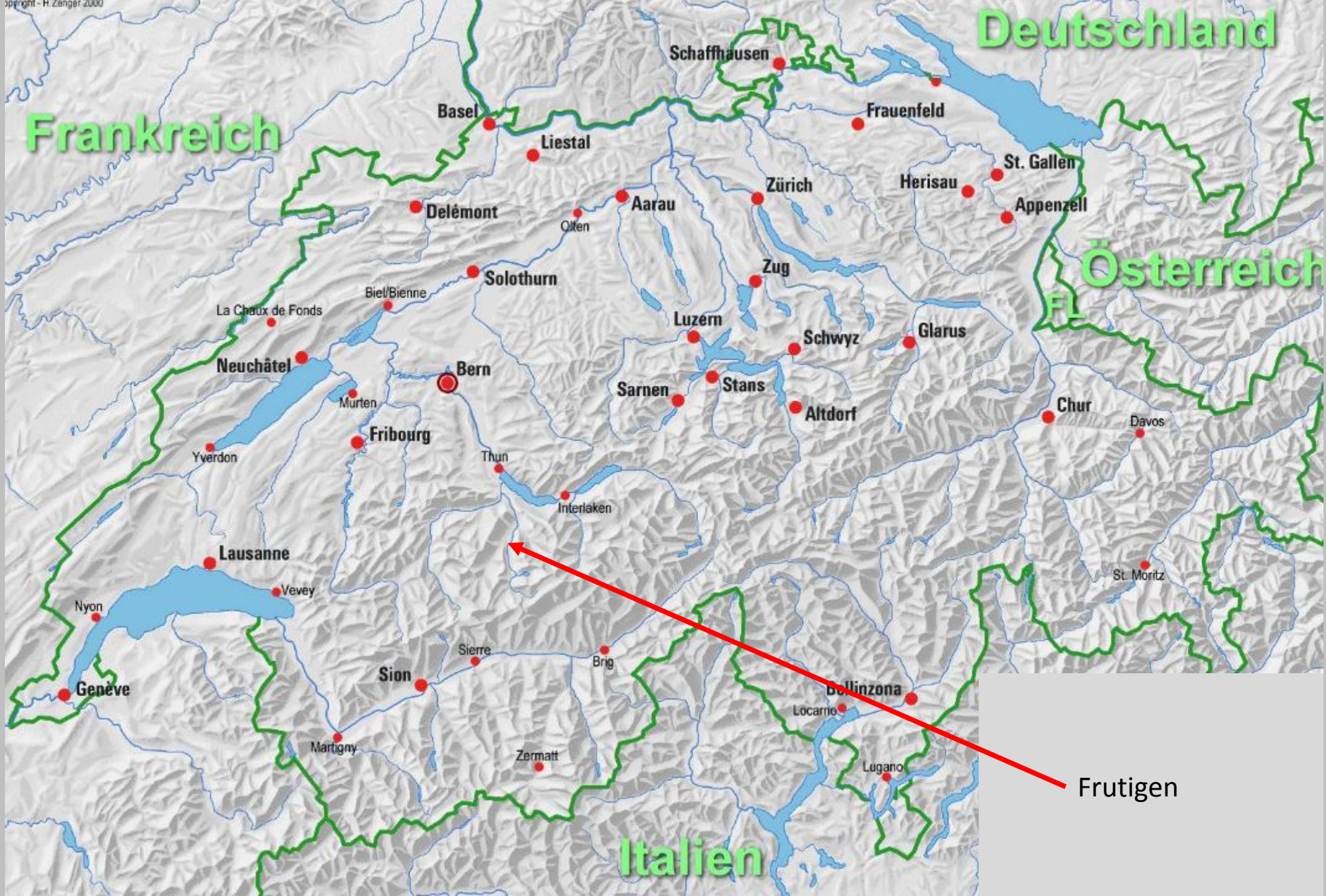




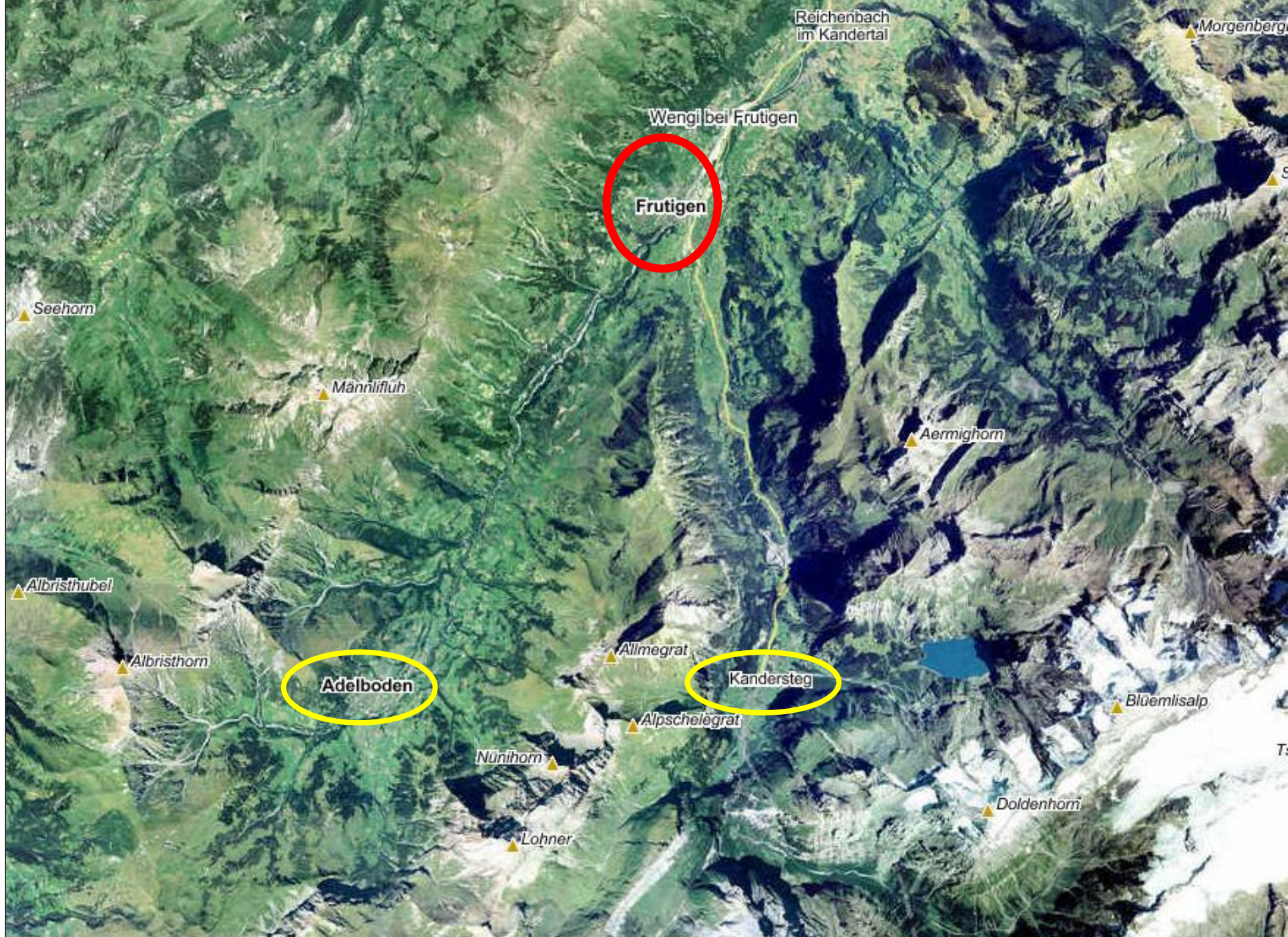
Epidemiology of wintersport accidents today – update 2014 from a single center study

Dominik Heim. Frutigen Switzerland

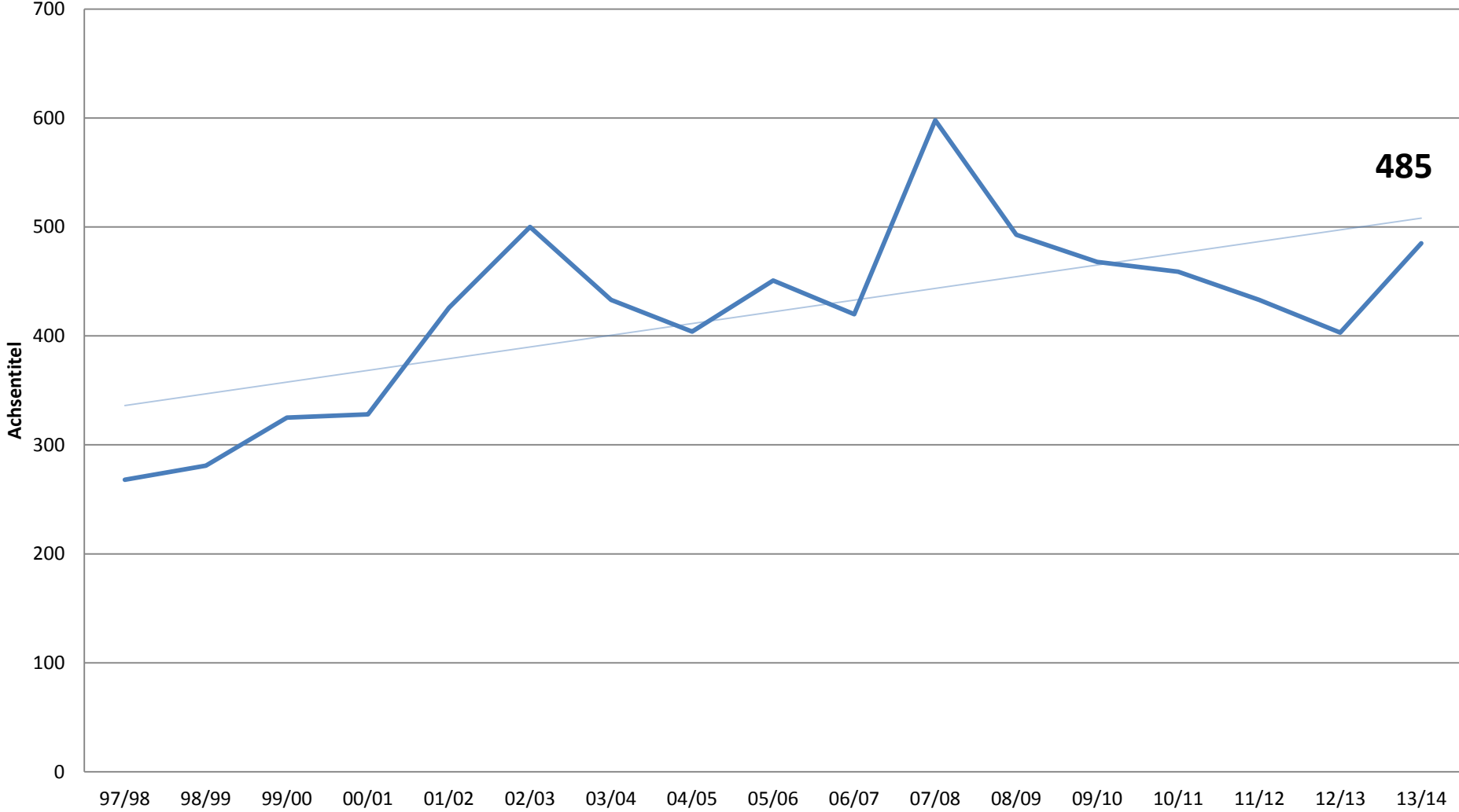


Frutigen

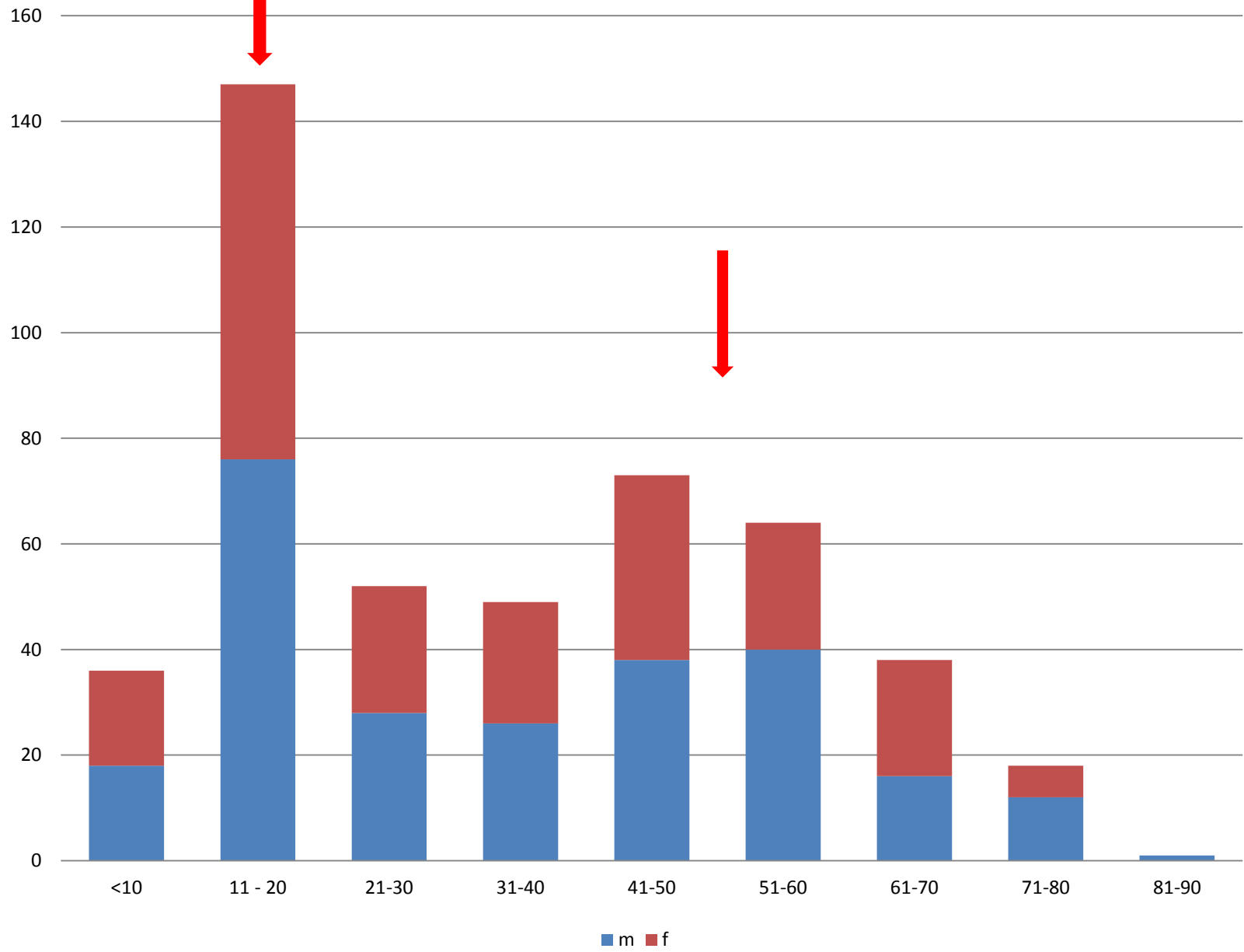




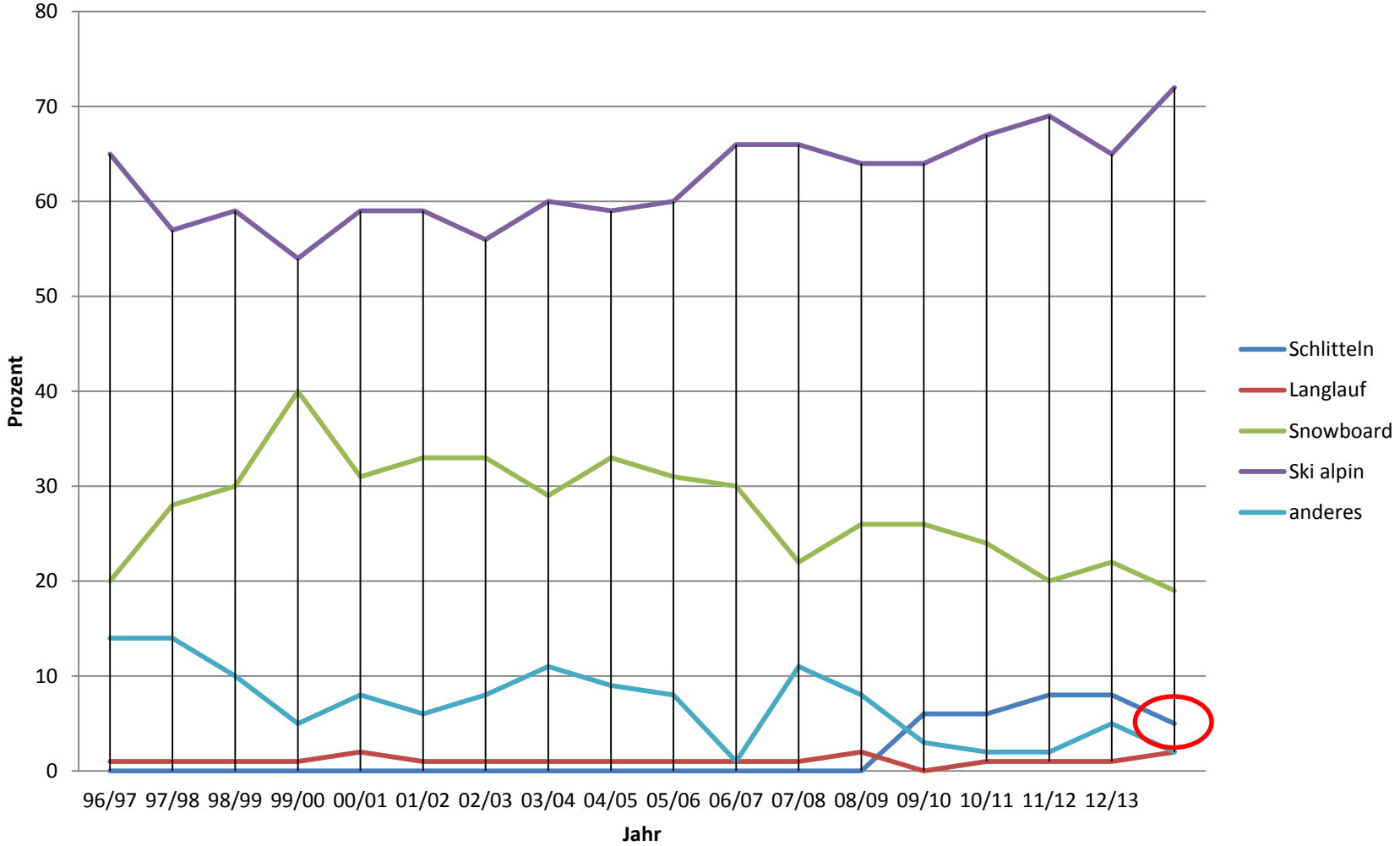
number of patients



gender and age (2013/14)



sports



a word about sledding ...

sledding injury pattern 1997 - 2012

- 20% head
 - 24% upper extremity
 - 11% trunk
 - 45% lower extremity
-
- 73% out-patients
 - 27% in-patients sledding
 - 18% in-patients ski/snowboard





runs into a tree ...



leg twisting while braking ...



sledge runs over the lower leg ...

- fractures

tibia shaft >

ankle >

forearm >

clavicula

that way!





Contents lists available at SciVerse ScienceDirect

Injury

journal homepage: www.elsevier.com/locate/injury



A 13-year analysis from Switzerland of non-fatal sledging (sledging or tobogganing) injuries

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ARTICLE INFO

Article history:

Accepted 3 August 2012

Keywords:

Sledging

Tobogganing

Sledging

Winter sport

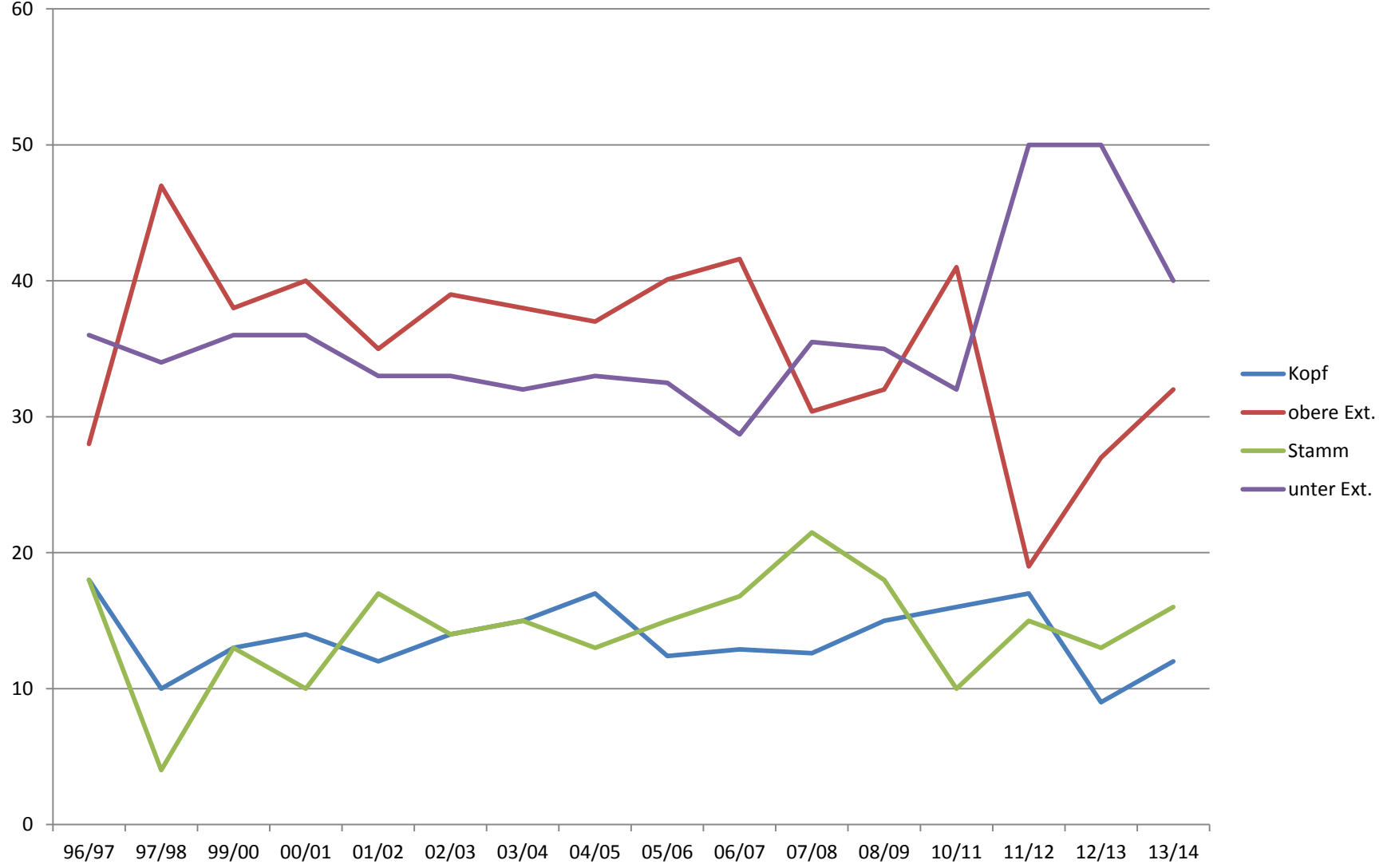
Trauma

ABSTRACT

Introduction: Winter sports have evolved from an upper class activity to a mass industry. Especially sledging regained popularity at the start of this century, with more and more winter sports resorts offering sledge runs. This study investigated the rates of sledging injuries over the last 13 years and analysed injury patterns specific for certain age groups, enabling us to make suggestions for preventive measures.

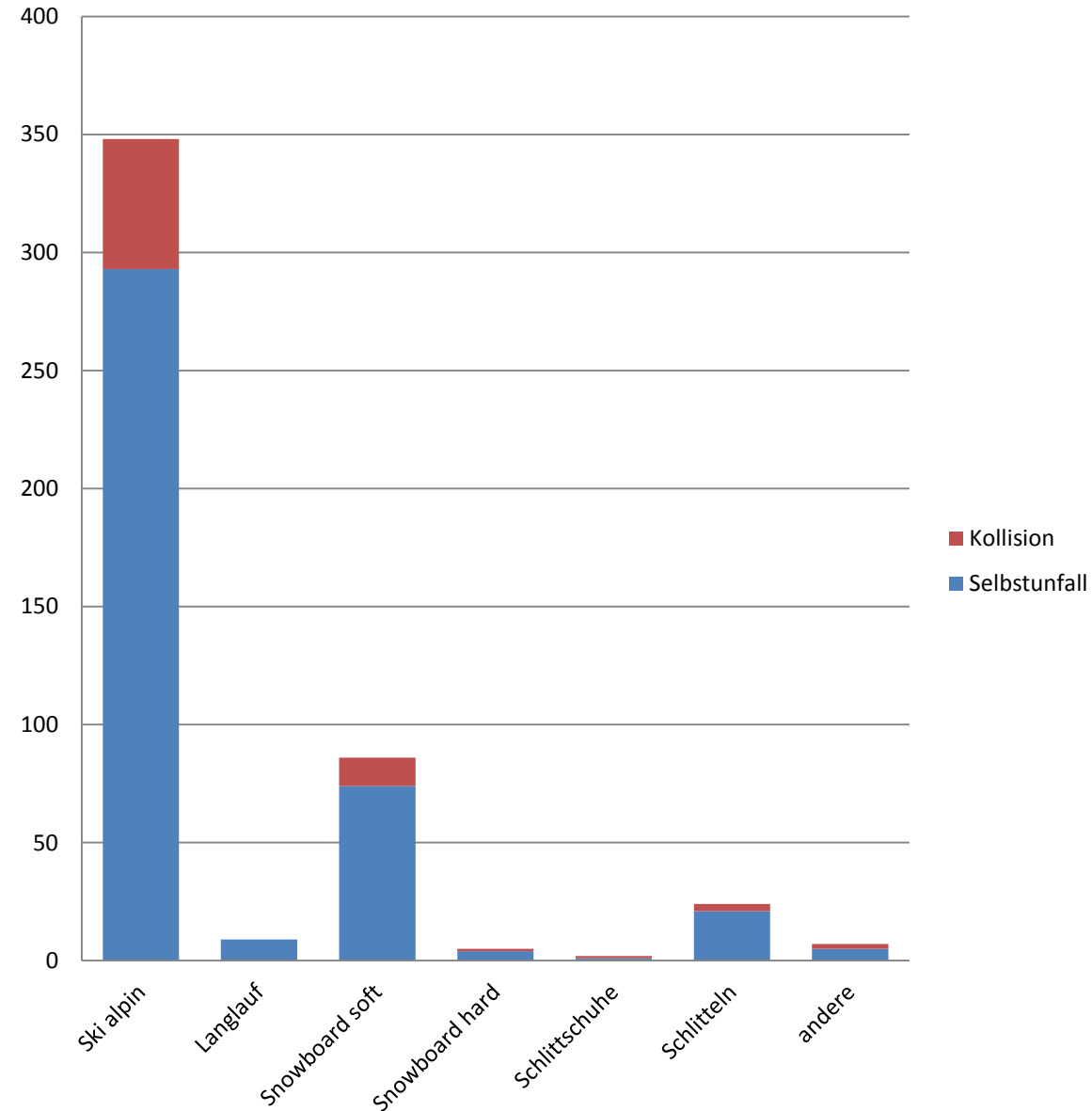
Methods: We present a retrospective analysis of prospectively collected data. From 1996/1997 to 2008/2009, all patients involved in sledging injuries were recorded upon admission to a Level III trauma centre. Injuries were classified into body regions according to the Abbreviated Injury Scale (AIS). The Injury Severity Score (ISS) was calculated. Patients were stratified into 7 age groups. Associations between age and injured body region were tested using the chi-squared test. The slope of the linear regression with 95% confidence intervals was calculated for the proportion of patients with different injured body

regions of injuries



a word
about
collisions...

accident reasons (selfafflicted/ collisions?)

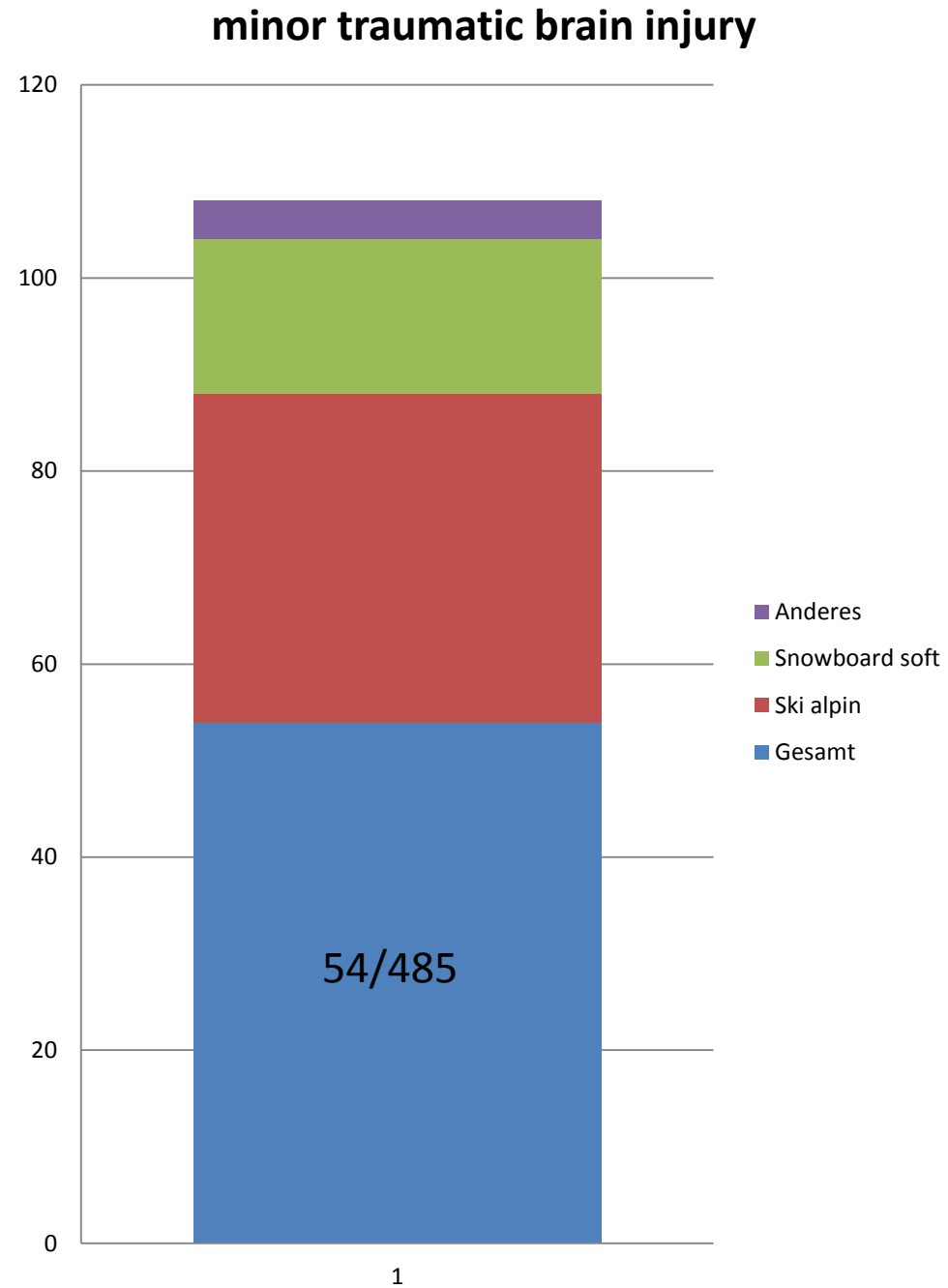


season 2013/
2014

74/ 485
collisions !

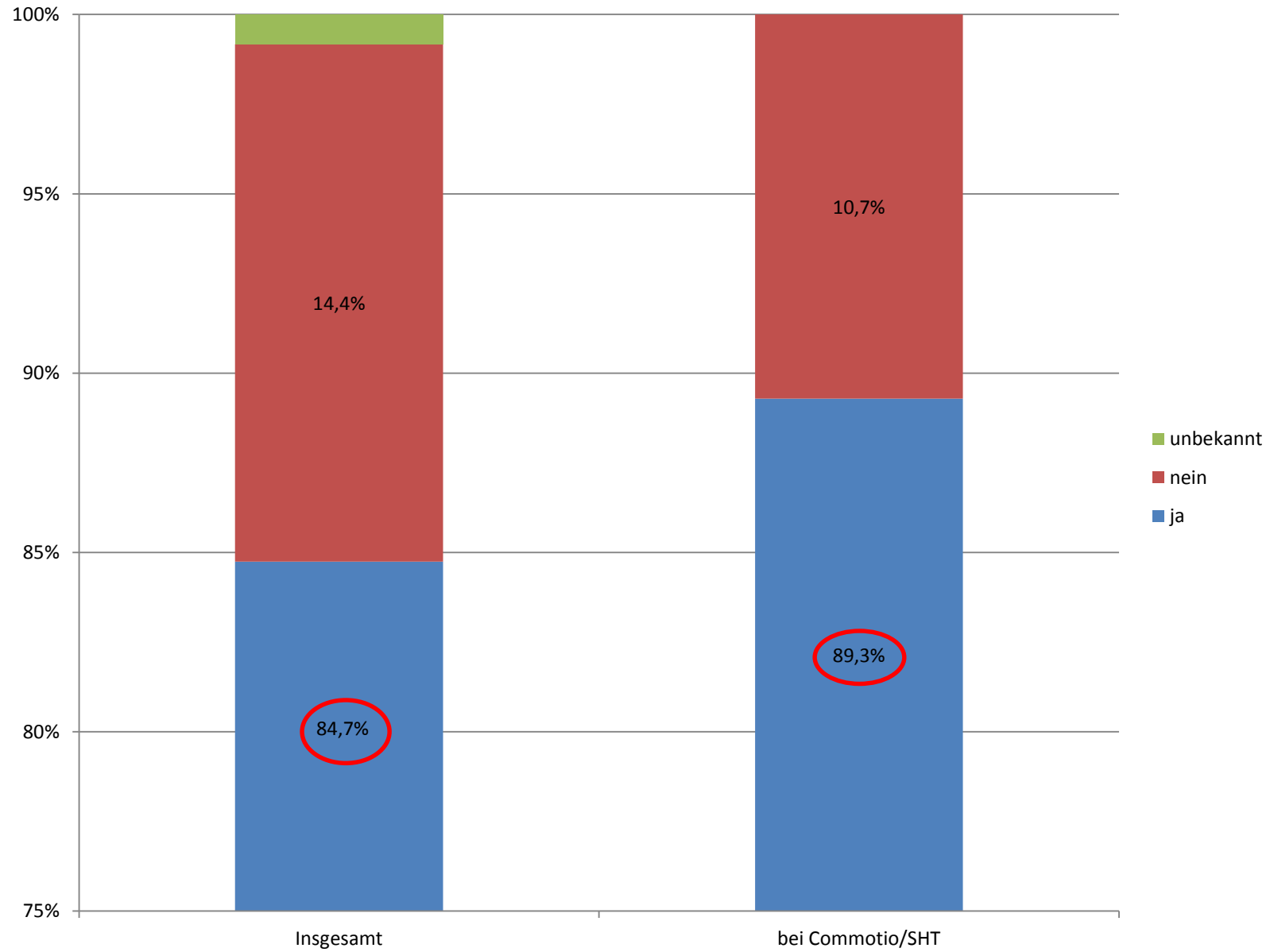
15%


a word about
MTBI ...



**season 2013/
2014
54 patients.**

helmets and MTBI

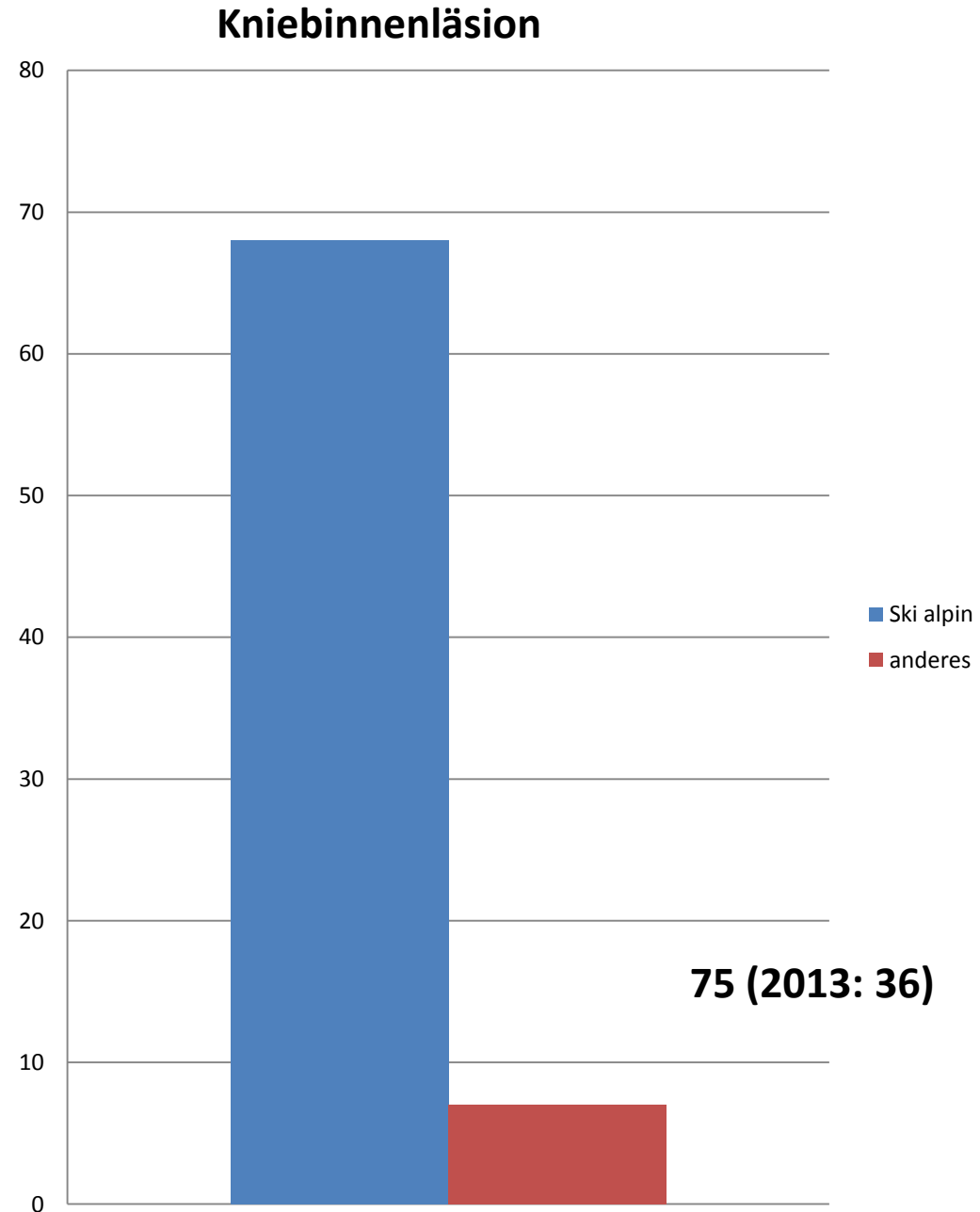


A close-up photograph of a grey motorcycle helmet. The helmet has several ventilation holes. On the forehead area, there is a small, irregular white mark that appears to be a scuff or impact. The helmet is attached to a yellow motorcycle, which is partially visible at the bottom. The text is overlaid on the right side of the helmet.

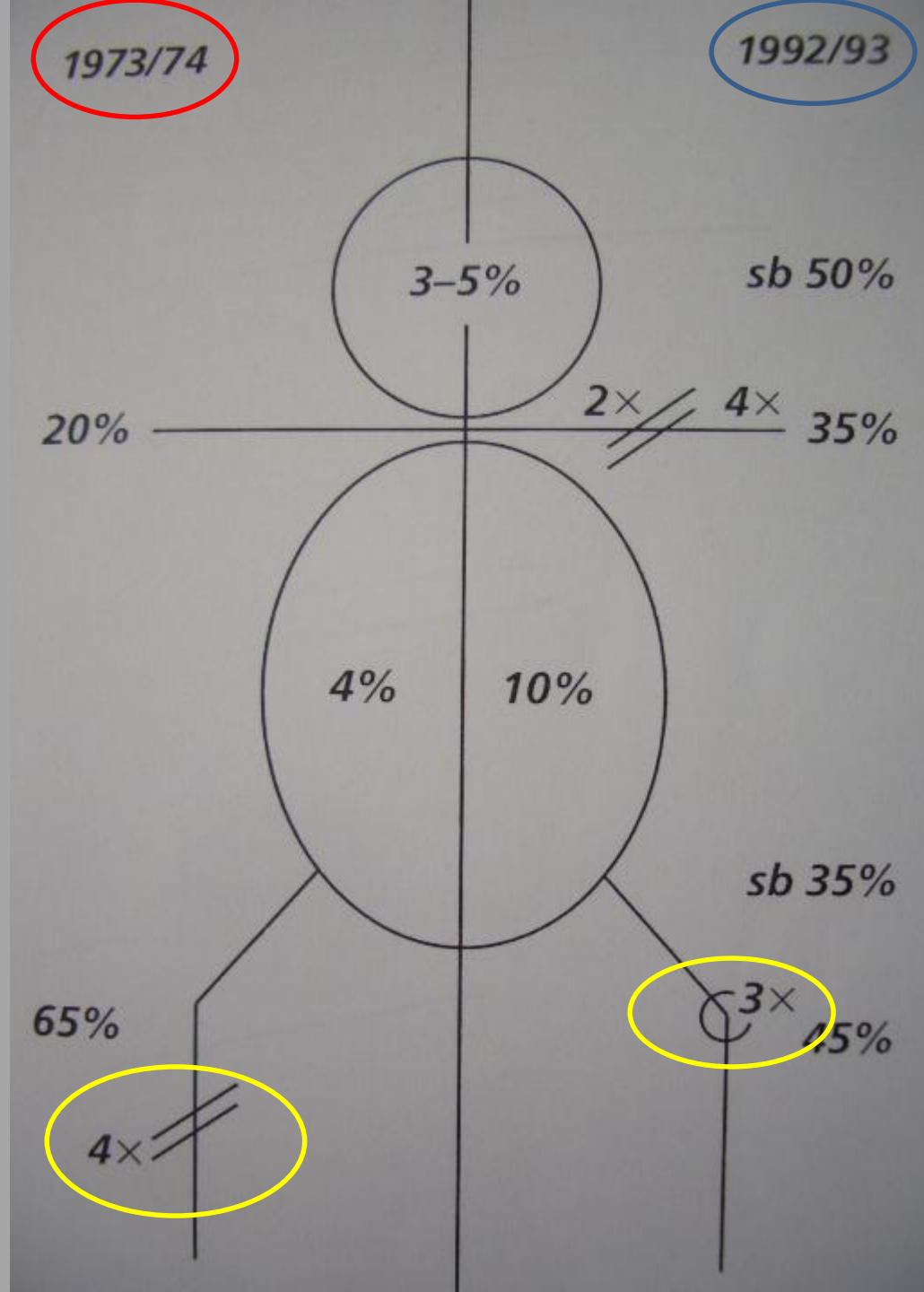
**helmets do not protect
from MTBI, but from
severe brain injuries (?)**

Grosskreutz A/ Heim D
Swiss knife/SGC Congress 2008

a word
about
the
knee...



change of
injury
pattern
between
1970 and
1990



D. Heim
„Alpine winter sports:
Injury trends in the last 20
years“
Praxis 1997; 86: 1931-
1933

results II

110 alpine skiers (77%)

17 snowboarders (12%)

15 others (11%) (sledding, snowblades, snowboots...)

results III

alpine skiing (110):

-conventional skis 21 (19%)

-carving skis 89 (81%)

results V: knee injuries in relation to sport mode

Carving

-contusio	13%	
-menisci	9%	
-cruciate ligament alone	21%	
-complex (ACL +)	17%	38%
-fractures	34%	
-dislocations	6%	

results V: knee injuries in relation to sport mode

conventional skis

-contusio	52%
-menisci	5%
-cruciate ligament alone	14%
-complex (ACL +)	14%
-fractures	14%
-dislocations	-

results V: knee injuries in relation to sport mode

snowboard

-Contusio	53%
-menisci	18%
-cruciate ligament alone	12%
-complex (ACL +)	12%
-fractures	5%
-Dislocations	-

knee injuries: conclusion I

alpine skiers >
snowboarders

knee injuries: conclusion II

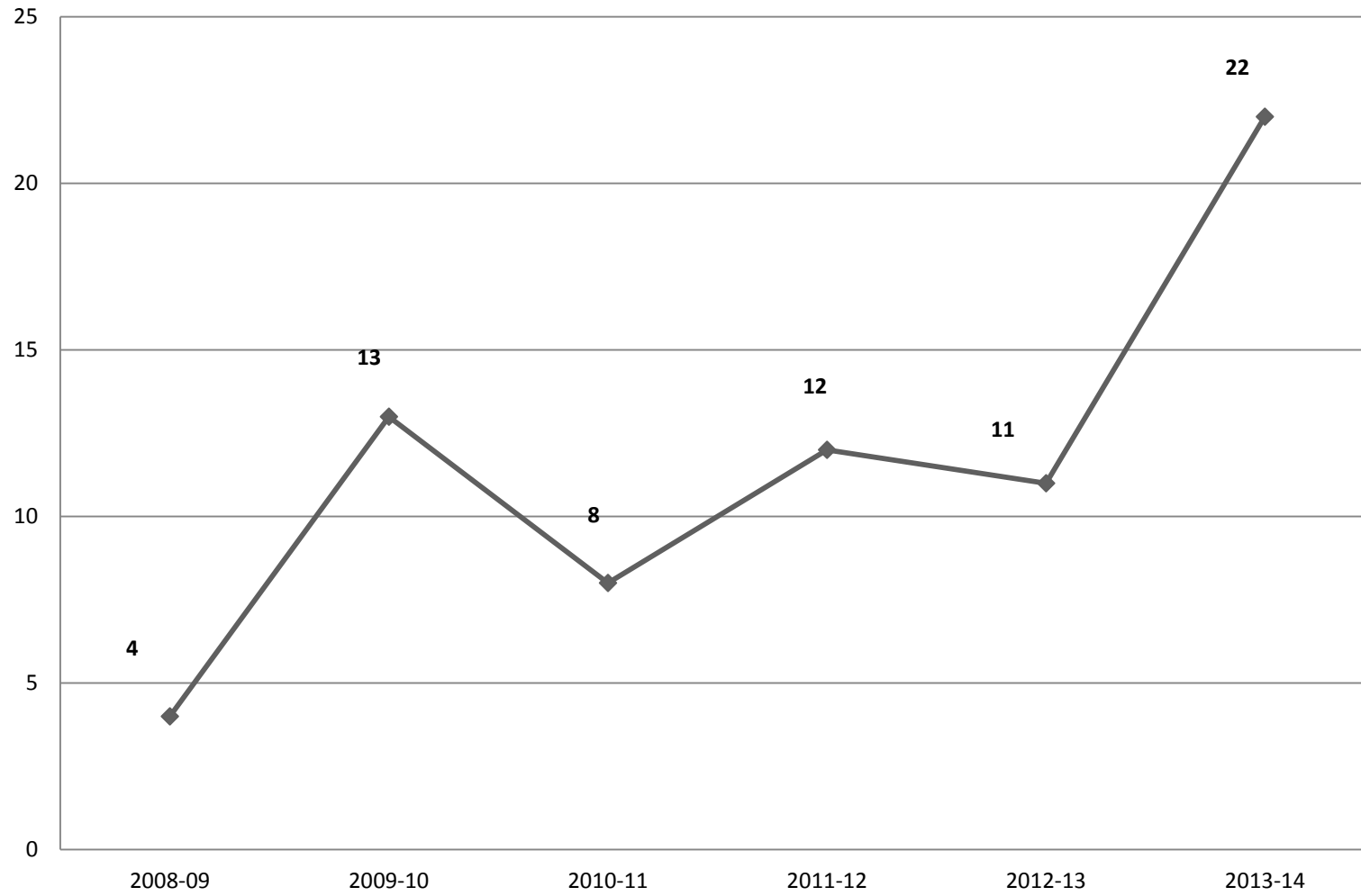
carving>

conventional skis

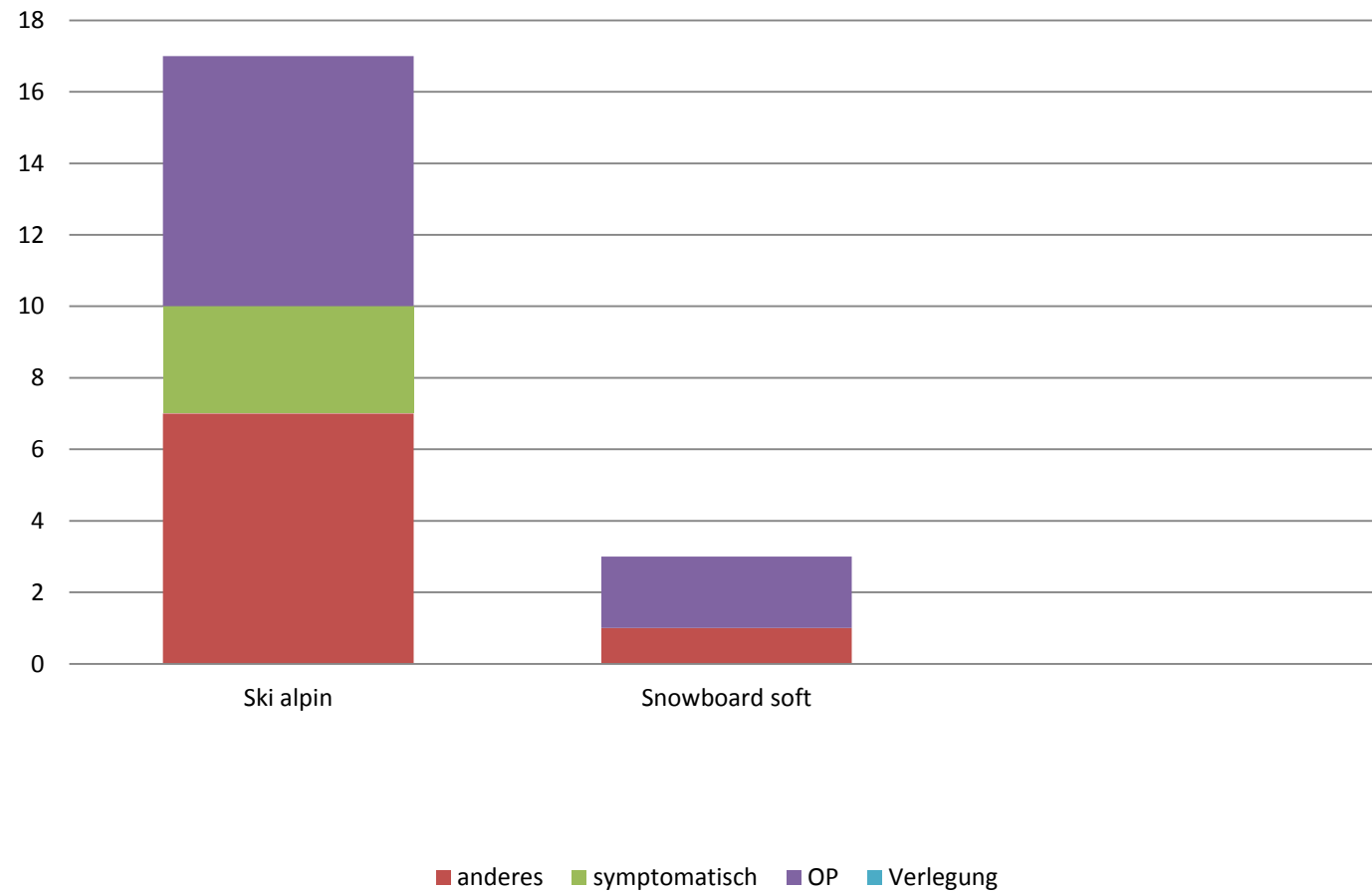
knee injuries: conclusion III

carving: knee
fractures/ cruciate
ligament

tibiaplateau-fracture



Claviculafrakturen (2014: 21/ 2013: 32)



„What are we talking about today?“

- increasing number of patients still
- the knee desperate
- MTBI/ helmet controversial
- sledding so fancy



just old hickory skis?