


Trauma i det unga permanenta bettet Epidemiologi

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Umeå



Prevalence and incidence of traumatic dental injuries in various countries

Author	No. of children	Age group	Prevalence (%)			Incidence (%)
			Total	Perm. Teeth	Prim. Teeth	
Andreasen & Ravn Denmark, 1972	487	1-17	46	22	30	
Ravn & Rossen Denmark, 1969	1378	7-16		16.7		3
Ravn Denmark, 1974	9665	6-17		29.3		
Järvinen Finland, 1979	1614	6-16		19.8		
Holland et al Ireland, 1968	2453	15		16.4		
Forsberg & Tedestam Sweden, 1990	1635	7-15	30	18	12	
Eriksson Finland, 1993	2542	5-18				2.3
Glendor et al Sweden, 1996	691	0-19				1.3
Hamblin et al UK, 1997	2022	11-14		34		3.2
Marcenes & Murray UK, 2001	2242	14		23.7		
Cortes et al Brazil, 2001	3702	9-14		16.1		



- ✓ being male
- ✓ having an incisal overjet greater than 5mm,
- ✓ living in an overcrowded household

increased the risk of having dental injuries.

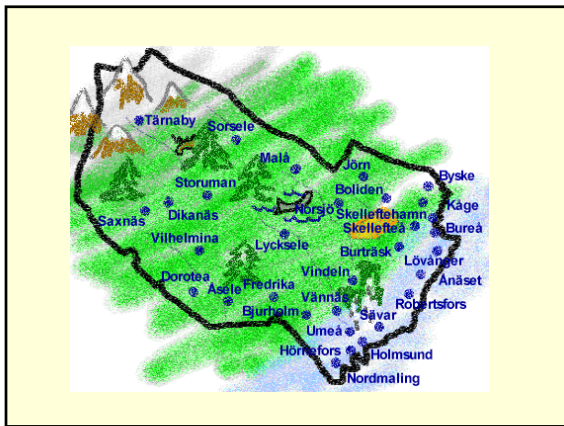
Marcenes W, Murray S, 2001

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Syfte

- Fastställa prevalens och incidens för tandskador i en ålderskohort 16-åringar i Västerbottens län, liksom ålders- och könsfördelningen.
- Beskriva utförd behandling upp till 16 års ålder.
- Beräkna behandlingstid och antal besök samt olika bakgrundsfaktors betydelse för behandlingstiden.

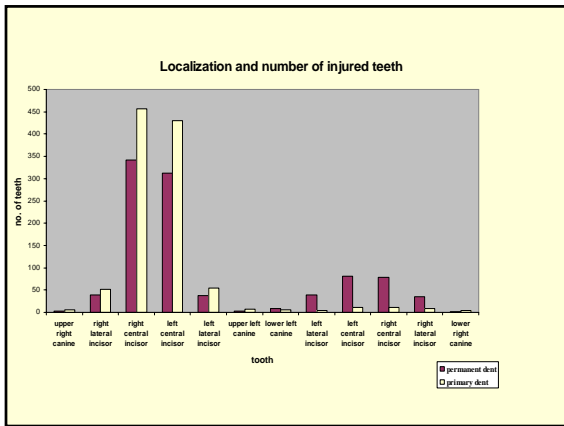
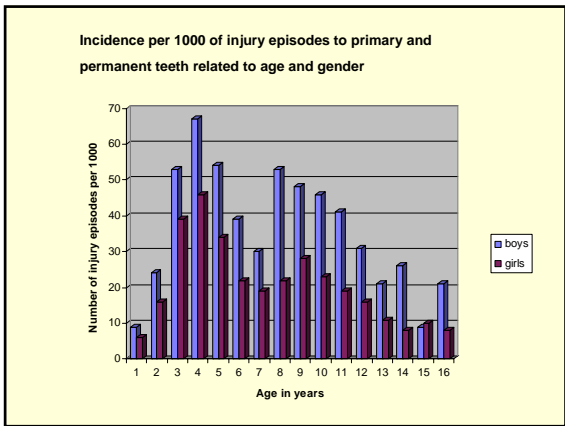


No. of dental injuries in both dentitions related to gender

Frequency of trauma	Total number of trauma episodes	Boys (%)	Girls (%)
1	1012	61	39
2	255	68	32
3-5	85	78	22
	1352	64	36

Total number of children with injury to primary and permanent teeth in relation to gender

Total number of dental records	No. of children with injury to permanent teeth	No. of children with injury to primary teeth	No. of children with injury to both dentitions
Boys (n=1494)	378 (25%)	359 (24%)	113 (8%)
Girls (n=1513)	197 (13%)	241 (16%)	50 (3%)
Total (n=3007)	575 (19%)	600 (20%)	163 (5%)



Number of registered diagnoses in the primary and permanent dentition

Diagnosis	Primary	%	Permanent	%
Infraction	8	1,0	58	5,0
Uncomplicated crown fracture	54	5,0	554	51,0
Complicated crown fracture	5	0,5	16	1,5
Uncomplicated crown-root fracture	0	0,0	7	0,5
Complicated crown-root fracture	0	0,0	4	0,5
Root fracture	16	1,5	13	1,0
Fracture of the alveolar process	2	0,5	3	0,5
Concussion	33	3,0	117	11,0
Subluxation	475	45,0	201	19,0
Extrusive luxation	30	3,0	9	1,0
Lateral luxation	45	4,5	10	1,0
Intrusive luxation	74	7,0	4	0,5
Avulsion	84	8,0	6	0,5
Injuries to the gingiva or oral mucosa	34	3,0	22	2,0
Unknown	191	18,0	56	5,0

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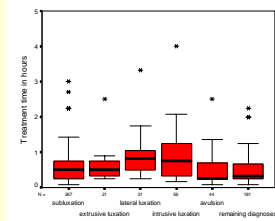


Relation between diagnosis of traumatic dental injury and frequency of endodontic treatment

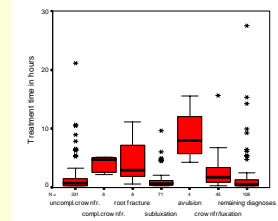
Diagnosis	No. of teeth	No. of endodontically treated teeth
Uncomplicated crown fracture	465*	10 (2%)
Uncomplicated crown-root fracture	7***	2 (29%)
Complicated crown or crown-root fracture	20***	20**
Root fracture	13****	5 (38%)
Luxation injury without displacement	229***	6 (3%)
Luxation injury with displacement	23***	8 (35%)
Avulsion	6	6
Tooth fracture in combination with a luxation injury	99	28 (28%)

* 89 uncomplicated crown fractures were combined with a luxation injury
 ** 7 pulp capping, 8 pulpotomy, 5 pulpectomy
 *** 8 subluxation and 21 concussion were combined with tooth fracture
 **** a total of 10 teeth with more than one diagnosis have been registered in more than one column.

Total treatment time per individual in the primary dentition related to diagnoses



Total treatment time per individual in the permanent dentition related to diagnoses



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Hamilton et al UK, 1997	2022	11-14		34		3,2
Marcenes & Murray UK, 2001	2242	14		23,7		
Ortiz et al Brazil, 2001	3702	9-14		16,1		
Borssén et Holm Sweden, 2002	3007	-16	35	19	20	2,8

Slutsatser

35% av barnen hade, vid ett eller flera tillfällen, skadat sina primära (20%) eller permanenta (19%) tänder. Tandskador var nästan dubbelt så vanliga hos pojkar (64%) som hos flickor (36%).

25% av 16-åringarna hade skadat sig mer än en gång och i den gruppen var pojkarnas dominans ännu tydligare.

Incidensen av tandskador var 2,8% per år.

Ungefär 1/3 av de skadade mjölkänderna förlorades, antingen vid det akuta traumatilfallet eller senare p.g.a. komplikationer. Sju permanenta tänder extraherades, alla efter lång behandlingstid.

Okomplicerade tandfrakturer dominerade i det permanenta bettet, pulpaala komplikationer var ovanliga (2%). Vid en samtidig luxationsskada ökade risken för pulpanekros 13 gånger.

I det primära bettet behövdes i medeltal 2,2 besök för varje barn som skadat sina tänder. Varje tandkada i det permanenta bettet behandlades i medeltal 3,4 gånger.

Den totala medelbehandlingstiden var 1,3 timmar och varierade mellan 0,1 och 27,5 timmar.

Diagnos och antal skadade tänder var av betydelse för behandlingstiden. Om en permanent tand skadades innan roten var färdigbildad ökade behandlingstiden.

Umeå- årets studentstad 2006

