

## Appendix 1: The Search Strategies to PubMed, EmBase and Cochrane Library.

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### PubMed:

- S1 (neck dissection)
- S2 (marginal OR accessory)
- S3 (injur\* OR damag\*)
- S4 S1 AND S2 AND S3

### Embase:

- 1 Neck dissection.mp. or exp neck dissection/
- 2 exp mandibular nerve/ or marginal mandibular nerve.mp.
- 3 Accessory Nerve.mp. or exp accessory nerve/
- 4 damage.mp.
- 5 exp injury/ or injur\*.mp.
- 6 2 or 3
- 7 4 or 5
- 8 1 and 6 and 7

### Cochrane Library:

- #1 Neck dissection
- #2 MeSH descriptor: [Neck Dissection] explode all trees
- #3 MeSH descriptor: [Accessory Nerve] explode all trees
- #4 accessory nerve
- #5 marginal nerve
- #6 MeSH descriptor: [Wounds and Injuries] explode all trees
- #7 damag\*
- #8 injur\*
- #9 {or #1-#2}

#10 {or #3-#5}

#11 (10-#8)

#12 {and #9-#11}

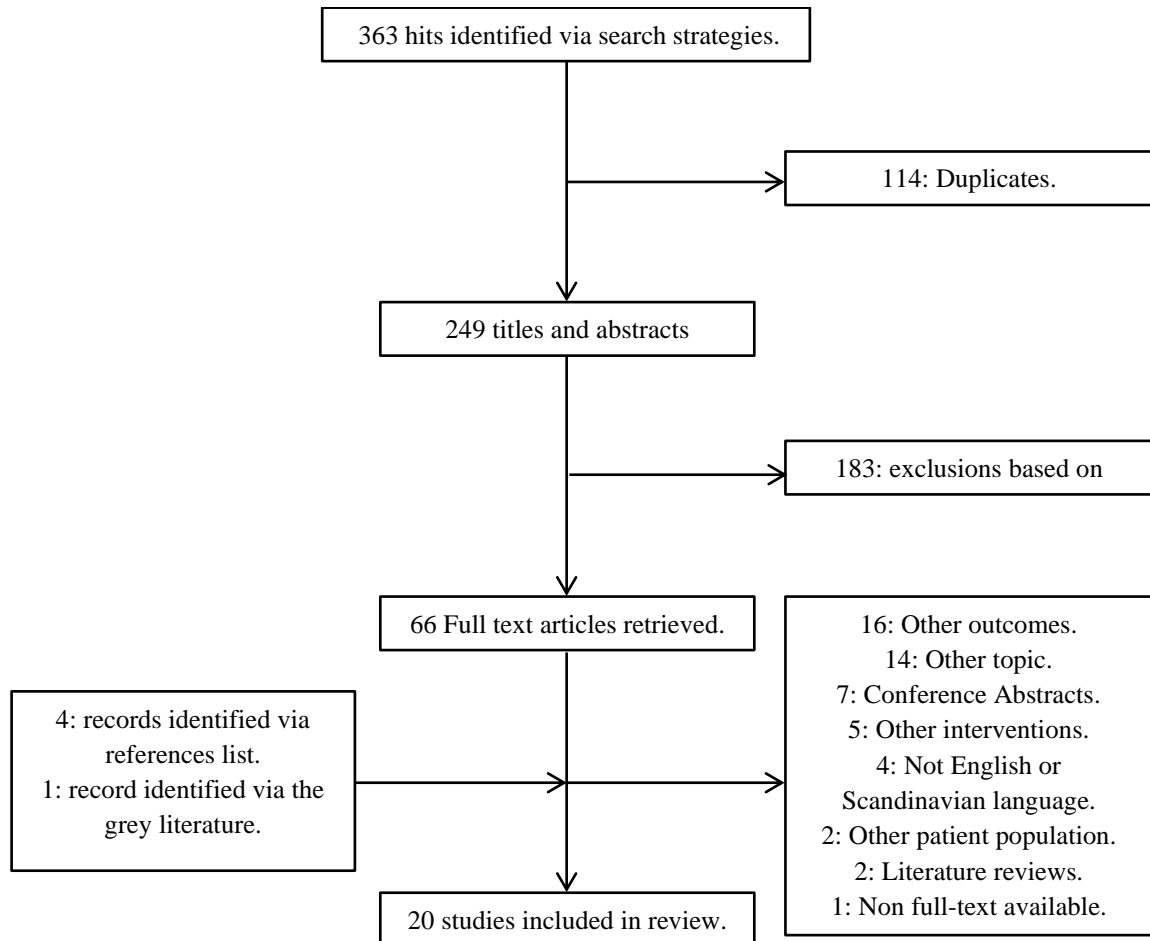
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Last search was conducted on May 1st 2017

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### Appendix 2– Flowchart of the Selection Process.

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### Appendix 3: The Quality Assessment of the Included Studies

	Q1 †	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
<b>Batstone <i>et al.</i> [4]</b>	Yes	Yes	Yes	Yes	No	CD	Yes	Yes	No	No	Yes	No	Yes	Yes
<b>Blomberg <i>et al.</i> [29]</b>	Yes	Yes	Yes	Yes	No	No	Yes	CD	Yes	No	Yes	NR	No	NR
<b>Cappiello <i>et al.</i> [14]</b>	Yes	Yes	CD	Yes	No	Yes	Yes	Yes	Yes	No	Yes	NR	Yes	CD
<b>Carenfelt <i>et al.</i> [7]</b>	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
<b>Cheng <i>et al.</i> [15]</b>	Yes	Yes	CD	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No
<b>Giordano <i>et al.</i> [30]</b>	Yes	Yes	CD	Yes	No	Yes	No	Yes	Yes	Yes	Yes	NR	Yes	No
<b>Glenn <i>et al.</i> [25]</b>	Yes	Yes	No	Yes	No	NR	NR	Yes	Yes	No	Yes	Yes	Yes	CD
<b>Hishamuddin <i>et al.</i> [28]</b>	No	Yes	Yes	Yes	No	NR	NO	Yes	Yes	No	Yes	NR	Yes	No
<b>Leipzig <i>et al.</i> [8]</b>	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
<b>Polistena <i>et al.</i> [26]</b>	Yes	No	No	No	No	Yes	Yes	Yes	Yes	NR	No	NR	Yes	Yes
<b>Prim <i>et al.</i> [5]</b>	Yes	Yes	No	Yes	No	Yes	NR	NR	Yes	NR	Yes	NR	Yes	No
<b>Saunders <i>et al.</i> [21]</b>	Yes	No	Yes	CD	No	NR	Yes	Yes	Yes	No	Yes	No	Yes	No
<b>Seppalainen <i>et al.</i> [22]</b>	No	Yes	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes	No
<b>Sheikh <i>et al.</i> [23]</b>	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No	Yes	No

<b>Sobol et al.</b> [31]	Yes	No	CD	NR	No	Yes	No	Yes	Yes	No	Yes	NR	Yes	No
<b>Tsuji et al.</b> [27]	Yes	Yes	CD	CD	No	NR	No	Yes	Yes	No	Yes	NR	Yes	No
<b>Umenda et al.</b> [24]	Yes	No	CD	Yes	No	No	NR	Yes	No	No	Yes	NR	Yes	CD
<b>Van Wilgen et al.</b> [9]	Yes	Yes	CD	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes
<b>Witt et al.</b> [32]	Yes	Yes	CD	Yes	No	No	No	Yes	Yes	Yes	Yes	No	Yes	No
<b>Zibordi et al.</b> [33]	Yes	Yes	No	Yes	No	No	CD	Yes	Yes	No	Yes	No	Yes	CD

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†. Refer to question 1-14, see table 4. **Abbreviations:** *Q(n)*, Number of the question. *CD*, Cant Determinate. *NR*, Not reported

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## Appendix 4 - Summary of Quality Assessment.

Questions	Yes	No	NR	CD
1: Was the research question or objective in this paper clearly stated?	18	2	0	0
2: Was the study population clearly specified and defined?	16	4	0	0
3: Was the participation rate of eligible persons at least 50%?	8	4	0	8
4: Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?	15	2	1	2
5: Was a sample size justification, power description, or variance and effect estimates provided?	0	20	0	0
6: For the analyses in this paper, were the exposure of interest measured prior to the outcome being measured?	9	6	5	0
7: Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?	10	6	3	1
8: For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome?	18	0	1	1
9: Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	16	4	0	0
10: Was the exposure(s) assessed more than once over time?	5	13	2	0
11: Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	19	1	0	0
12: Were the outcome assessors blinded to the exposure status of participants?	3	8	9	0
13: Was loss to follow-up after baseline 20% or less?	19	1	0	0
14: Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?	4	11	1	4
<b>Overall Risk of Bias.</b>				<b><i>n. (%)</i></b>

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Good	10 (50.0%)
Fair	7 (35.0%)
Poor	3 (15.0%)

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**Abbreviations:** NR, Not Reported. CD, Cant Determinate.

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