

Author

Frölke, Jan Paul (Nijmegen NL) | Dr. Radboud university medical center - None

Title

Incidence of major leg amputations during COVID-19 pandemic: epidemiological data obtained through reimbursement information system

Coauthors

De Boer AWH, Rommens GMC

Summary

Surgeons reported doubling incidences of major limb amputations during the COVID-19 pandemic in 2020. Based on reimbursement data however no nationwide differences were registered compared to the years before.

Introduction/ basics

During the COVID-19 lockdown in the spring of 2020, it was reported by surgeons from hospitals in the epicenter in The Netherlands that the number of major leg amputations (above ankle level) more than doubled. Due to fear of asking for care and coming to the hospital, patients would have been treated too late as a result of which limb-saving treatments were no longer possible [see ref]. This study examines whether the trend from the epicenter of the COVID-19 pandemic has also manifested itself at the national level throughout 2020.

Material method; implementation/ process

The Dutch national open source database www.opendisdata.nl was used to obtain data from leg amputations below and above the knee including cause of amputation in the period 2015-2020. In the Netherlands all patients seen and treated in a hospital (outpatient and inpatient) are registered with a diagnosis-treatment combination code (DBC). Hospitals are reimbursed on the basis of these DBC codes. These registrations are collected in a national database, the DBC Information System (DIS), which contains detailed information on amputation level and indication.

Results

In these six years' time period a total of 12,912 patients underwent major leg amputations at the level above-knee, through-knee or below-knee in these six years below the knee (so-called



'major amputations') no clear change could be observed in 2020 compared to the five years before.

Discussion/ conclusion; conclusion for the practice

Data obtained from reimbursement claims via the DBC Information System were used for studying incidence rates of major leg amputations including causes of amputations. It turns out that there are no nationwide differences during the COVID-19 pandemic in 2020 versus the years before.

References

Schuivens PME, Buijs M, Boonman-de Winter L, Veen EJ, de Groot HGW, Buimer TG, Ho GH, van der Laan L. Impact of the COVID-19 Lockdown Strategy on Vascular Surgery Practice: More Major Amputations than Usual. Ann Vasc Surg. 2020 Nov;69:74-79. doi: 10.1016/ j.avsg.2020.07.025. Epub 2020 Aug 4.

 $\begin{array}{c}
1400 \\
1200 \\
1000 \\
800 \\
600 \\
400 \\
200 \\
0 \\
2015 \\
2016 \\
2017 \\
2018 \\
2019 \\
2020 \\
2020 \\
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Image: Figure_Incidence or major leg ampu_207.png

Legend to figure! Numbers of major lower limb amputations in The Netherlands from 2015-2020. Blue line represents below-knee amputation, red line represents above-knee amputation and grey line represents knee disarticulation.