

**Title: Recovery lies in calmness: COVID-19 restrictions result in less post-op pain**

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**Background and aims:** The COVID-19 pandemic affected provision of care in hospitals, worldwide. Among other restraints, elective surgeries were postponed, and access for visitors and relatives was stopped or strictly limited. Aim of this study was to evaluate if patients rated their worst post-operative pain equally, higher, or lower from January to March 2021 when strict restriction were imposed in German hospitals.

**Methods:** Based on data from the German QUIPS project (Quality Improvement of Post-Operative Pain Treatment), we compared data about post-operative worst pain. Patients assessed their worst pain using a numeric rating scale from 0 to 10 after two non-elective surgeries (appendectomy, laparoscopic cholecystectomy) in two periods: from January to March 2021 (restriction period group, sample size 226 patients) and from January to March 2019 (control group, sample size 479 patients). We report means and corresponding 95% confidence intervals. Periods were compared using t-tests.

**Results:** During the restriction period, patients reported significantly lower worst pain intensities: mean worst pain in appendectomy patients was 4.6 during the restrictions compared to 5.5 in 2019 ( $p=0.039$ ); in cholecystectomy patients, mean worst pain was 4.7 during restrictions and 5.1 in 2019 ( $p=0.049$ ).

**Conclusions:** Our results suggest that patients perceived the quality of postoperative pain management to be better during Covid-19-related hospital restrictions. Patients might benefit from quiet and privacy after surgery, and they might feel grateful for medical care received in face of a burdened health system. [www.quips-projekt.de](http://www.quips-projekt.de)

**Additional information:**

The poster shows differences in mean patient-reported worst pain intensities after appendectomy and laparoscopic cholecystectomy. When analyzing data from all surgical procedures in our database, there is still a difference between the two periods but it is not significant. (see table 1 below)

Group statistics all datasets					
year	N	Mean	Std. Deviation	Std. Error	Mean
ergNrsMaximal 2019	6266	4,91	2,574		0,033
al 2021	3919	4,77	2,626		0,042

Table 1: mean worst pain across all procedures in QUIPS-database

Group Statistics appendectomie 5-470					
year	N	Mean	Std. Deviation	Std. Error	Mean
ergNrsMaximal 2019	77	5,49	2,269		0,259
al 2021	43	4,63	2,012		0,307

Table 2: mean worst pain after appendectomy

Group Statistics lapC 5-511.11					
year	N	Mean	Std. Deviation	Std. Error	Mean
ergNrsMaximal 2019	402	5,09	2,212		0,110
al 2021	183	4,69	2,283		0,169

Table 3: mean worst pain after lap. cholecystectomy

# LESS POST-OPERATIVE PAIN IN COVID-19 SHUTDOWN

Recovery lies in calmness:

## COVID-19 Restrictions Result in Less Post-Operative Pain

### Background and aims:

COVID-19 pandemic affected provision of care:

- Overloading of the healthcare system
- Postponement of elective surgeries
- No or less visitors

Research question:

Did patients rate their post-operative pain equally, higher, or lower while strict restrictions were imposed in German hospitals.

### Methods:

- Data source: German QUIPS project (Quality Improvement of Post-Operative Pain Treatment)
- Outcome assessed: worst pain intensity (NRS-scale)
- Selected non-elective surgeries: appendectomy, lap. cholecystectomy
- Compared Periods: Jan.-Mar. 2021 (restriction period) and Jan.-Mar. 2019 (control period).
- Sample size: 226 patients in restriction period, 479 patients in control period
- Statistics: means, t-tests for comparing periods

### Results:

During the restriction period, patients reported significantly lower worst pain intensities:

- mean worst pain intensity in appendectomy patients was 4.6 during restrictions compared to 5.5 in 2019 ( $p=0.039$ );
- cholecystectomy patients, reported mean worst pain of 4.7 during restrictions and 5.1 in 2019 ( $p=0.049$ ).

### Conclusions:

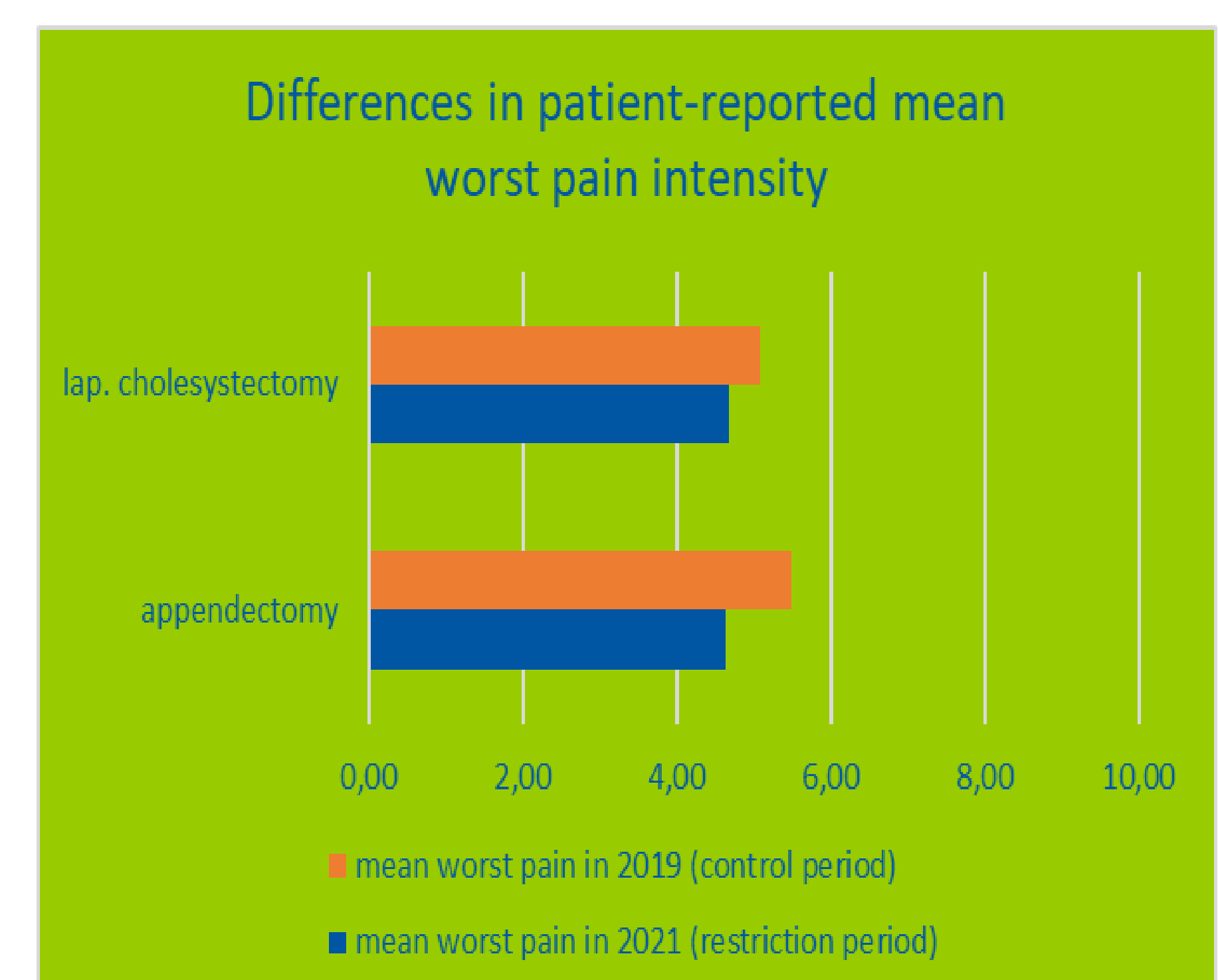
Patients perceived the quality of post-op pain management as better during Covid-19-related hospital restrictions. They might have benefitted from quiet and privacy after surgery, and they might have been grateful for medical care in face of a burdened health system.



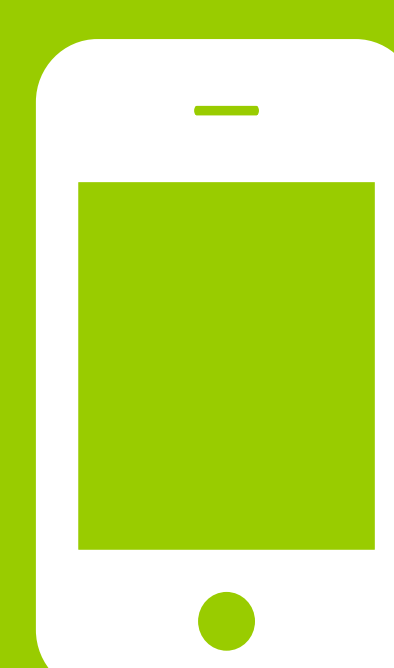
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