Appendiks til Hanna Eikås Klem, Tuva Sofie Tveiten, Sigrid Beitland, Stine Malerød, Doris Tove Kristoffersen, Terese Dalsnes, Maria Beate Nupen-Stieng, Lillebeth Larun. Tidlig

aktivitet hos respiratorpasienter – en metaanalyse. Tidsskr Nor Legeforen 2021; 141. doi: 10.4045/tidsskr.20.0351.

Dette appendikset er et tillegg til artikkelen og er ikke bearbeidet redaksjonelt.

## Appendiks 4: Oversikt over uheldige hendelser i de inkluderte studiene

| Forfatter,<br>årstall (ref)    | Forhåndsbestemt definisjon,<br>uheldige hendelser  | Antall uheldige hendelser   | Antall hendelser<br>intervensjon<br>Alvorlige/mindre<br>alvorlige | Antall økter<br>intervensjon | Antall hendelser<br>kontroll<br>Alvorlige/mindre<br>alvorlige | Antall økter<br>kontroll | Interven-<br>sjon<br>(total n) | Kontroll<br>(total n) |
|--------------------------------|--|---|---|------------------------------|---|--------------------------|--------------------------------|-----------------------|
| Amunda-<br>dottir 2019<br>(31) | Ikke oppgitt   | Ikke oppgitt  | Ikke oppgitt  | Ikke oppgitt                 | Ikke oppgitt  | Ikke oppgitt             | 29                             | 21                    |
| Burtin<br>2009 (15)            | Malign arrhythmias, symptoms of<br>myocardial ischemia, and respiratory<br>distress leading to symptoms of<br>intolerable dyspnea were defined as<br>severe adverse events (s. 2-3)  | No severe adverse events were<br>identified. Exercise was terminated early in 16<br>individual sessions because of SpO2 <90%<br>(n=8), SBP >180 mm Hg $(n=6)$ , or a >20%<br>decrease of diastolic blood pressure $(n=2)$ (s.<br>4) | 0/16*   | 425                          | Ikke oppgitt  | Ikke oppgitt             | 31                             | 36                    |
| Condessa<br>2013 (22)          | All cardiorespiratory variables<br>(respiratory rate, heart rate, systolic and<br>diastolic blood pressure, and<br>oxyhaemoglobin saturation) were<br>recorded again one minute after the end<br>of the protocol in both groups to identify<br>haemodynamic instability as an adverse<br>event (s. 102)                    | The monitoring of cardiorespiratory variables<br>did not identify any adverse events (s. 105)   | 0   | Ikke oppgitt                 | 0   | Ikke oppgitt             | 38                             | 39                    |
| Dantas 2012<br>(17)            | Ikke oppgitt   | Ikke oppgitt  | Ikke oppgitt  | Ikke oppgitt                 | Ikke oppgitt  | Ikke oppgitt             | 14                             | 14                    |
| Dong 2014<br>(27)              | Serious adverse events included fall to<br>knees, endotracheal tube removal,<br>systolic blood pressure >200 mmHg,<br>systolic blood pressure <90 mmHg, and<br>desaturation to <80%, indwelling<br>catheter prolapsed (such as enteral<br>feeding tube, urinary tube, chest tube,<br>arterial or venous catheters) (s. 49) | No serious adverse events occurred in the<br>rehabilitation group, and only 1 patient<br>developed orthostatic hypotension when<br>standing bedside (s. 50)   | 0/1   | Ikke oppgitt                 | Ikke oppgitt  | Ikke oppgitt             | 30                             | 30                    |
| Dong 2016<br>(16)              | The occurrence of adverse events<br>including falling to the knees,<br>tracheostomy tube removal, and<br>prolapse of an indwelling catheter (such<br>as enteral feeding tube, urinary tube,<br>drainage tube, and arterial or venous<br>catheters) (s. 243)  | Ikke oppgitt  | Ikke oppgitt  | Ikke oppgitt                 | Ikke oppgitt  | Ikke oppgitt             | 53                             | 53                    |

| Dos Santos*                       | Ikke oppgitt   | Ikke oppgitt   | Ikke oppgitt | Ikke oppgitt | Ikke oppgitt | Ikke oppgitt | 13  | 15  |
|-----------------------------------|--|--|--------------|--------------|--------------|--------------|-----|-----|
| 2018 (23)<br>Eggmann<br>2018 (29) | Prospectively defined adverse events<br>(AE) included new hemodynamically<br>relevant arrhythmias or otherwise<br>unstable hemodynamics, oxygenation<br>desaturation under 85%, a fall or other<br>injury and any accidental removal of a<br>tube, catheter or similar device. Per<br>definition, AEs occurred during or up to<br>15min after physiotherapy and persisted<br>despite an intervention or therapy<br>interruption (s. 5) | There were 4 AEs, in the<br>experimental group due to an oxygen<br>desaturation while cycling and 3 in the control<br>group during mobilisation (one oxygen<br>desaturation, two unstable haemodynamics)<br>(s. 6)   | 0/1          | 407          | 0/3          | 377          | 58  | 57  |
| Hodgson<br>2016 (18)              | Serious adverse events including: falling<br>to the floor, cardiac arrest, rapid atrial<br>fibrillation, ventricular tachycardia or<br>other dangerous arrhythmia during<br>exercise, oxygen saturation less than<br>80% for greater than 3 minutes,<br>unplanned extubation, or loss of any<br>invasively inserted line (s. 1148)   | There were no serious adverse events. Adverse<br>events requiring a mobilization episode to stop<br>were reported in four of the control group<br>patients (agitation was reported in two<br>patients and transient hypotension in two<br>patients), and one adverse event was reported<br>in the intervention group (agitation) that<br>required the exercise session to be ceased (s.<br>1149)   | 0/1          | Ikke oppgitt | 0/4          | Ikke oppgitt | 29  | 21  |
| Kho 2019<br>(30)                  | Ikke oppgitt   | 4 patients experienced 4 adverse events (1<br>Cycling, 3 Routine): uncontrolled arrhythmia<br>(n=2), 1 desaturation to 80% and 1 elevated<br>heart rate during ambulation (both returned to<br>baseline following rest) (s. 5)   | 0/2          | 247          | 0/3          | 198          | 36  | 30  |
| Martin 2011<br>(21)               | Ikke oppgitt   | There were no adverse events observed during<br>IMST or og SHAM training (s. 5)  | 0            | Ikke oppgitt | 0            | Ikke oppgitt | 35  | 34  |
| Morris 2016<br>(20)               | Adverse events were quantified by<br>deaths, device removals, reintubations,<br>and patient falls during physical therapy<br>(s. 3)  | The majority of adverse events captured were<br>not specifically related to SRT delivery.<br>Specific to SRT, there were no untoward<br>events such as endotracheal tube removal,<br>vascular access device removal, patient near-<br>fall or fall, or cardiac arrest. However, there<br>was an episode of asymptomatic bradycardia<br>during a progressive resistance exercise<br>session lasting less than 1 minute, with the<br>patient completing the session afterwards. (s.<br>2699) | 1/11         | Ikke oppgitt | <b>0</b> /13 | Ikke oppgitt | 150 | 150 |
| Moss 2016<br>(19)                 | Ikke oppgitt   | One patient had a syncopal episode during a<br>PT session, and another patient was<br>readmitted to the hospital with polyarthralgia<br>that was possibly related to PT interventions<br>(s. 6)  | 0/2          | 784          | Ikke oppgitt | 404          | 59  | 61  |
| Schaller 2016<br>(25)             | Tabell 3 s. 1385   | No serious adverse events were observed.<br>Hypotension was the most frequently reported<br>adverse event. We recorded no adverse events   | 0/25         | 1246†        | <b>0</b> /10 | 908†         | 104 | 96  |

|                          |  | of falls, dislodgement of endotracheal tubes or<br>central lines, or episodes of hypertension (s.<br>1385)   |             |              |                |              |     |     |
|--------------------------|--|--|-------------|--------------|----------------|--------------|-----|-----|
| Schweickert<br>2009 (26) | Serious adverse events, in accordance<br>with recently published literature,<br>included fall to knees, endotracheal tube<br>removal, systolic blood pressure more<br>than 200 mm Hg, systolic blood pressure<br>less than 90 mm Hg, and desaturation to<br>less than 80%. (s. 1877) | There was one serious adverse event<br>(desaturation less than 80%). Discontinuation<br>of therapy as a result of patient instability<br>occurred in 19 (4%) of all sessions, most<br>commonly for perceived patient-ventilator<br>asynchrony (s.1879) | 1/19*       | 498          | Ikke oppgitt   | Ikke oppgitt | 49  | 55  |
| Tonella 2017<br>(24)     | Ikke oppgitt   | It can be concluded that the electronic IMT<br>device is safe, as it did not adversely affect<br>HR, MAP, and SpO2 variations (s. 933)   | 0           | Ikke oppgitt | Uklart oppgitt | Ikke oppgitt | 8   | 11  |
| Wright 2018<br>(28)      | Ikke oppgitt   | One adverse event (AE) related to physical<br>rehabilitation was reported during the study<br>and occurred in the intervention group when a<br>tracheostomy needed to be re-sited for a cuff<br>leak. There were no serious AEs (s. 218).              | <b>0</b> /1 | 2068         | <b>0</b> /0    | 1335         | 150 | 158 |

\* Oppgitt som årsak til at intervensjonen ble avbrutt, og ikke beskrevet som uheldige hendelser. Tallet er inkludert i analysen.
† Studien oppgir dager, ikke økter, men det er trolig én økt pr. dag.