

“Why oxygen robots could be a game changer” Webinar Q&A 2nd of December, 2021

Q) Is it possible to use these results from the studies, when thinking about treating the patients in the comfort of their own homes?

A)

Linette Kofod, Ph.d student, PT:

“That would be a speculated answer because we do not know, and we need to regulate and measure the saturation all the time. And right now, I do not think that it is possible.

But it is definitely the next thing to investigate, compared with rehabilitation settings. What happens when we give them automated oxygen during 1 hour of exercise.”

Tessa Schneeberger, Ph.d student, PT:

“We tried some physical activities in laboratory settings and what we experienced when we let patients climb stairs with automated oxygen, and interestingly it showed us that the duration of the exercise was too short to be able to see a difference.

If it is like getting up from a chair, people will not feel a difference because it will be too narrow a window.

For longer physical tasks, like gardening, I definitely think that it would make a difference.”

Q) Will it have an impact on the rehabilitation when the patient can be more active when the oxygen therapy is personalized and titrated automatically?

A)

Linette Kofod, Ph.d student, PT:

“We need to look at the oxygen level during exercise as a first. The study that we did, is the first study to prove that we can improve the endurance. There are many other studies that we need to do. But I am definitely aware of need of more oxygen or saturation in the acceptable level.”

Tessa Schneeberger, Ph.d student, PT:

“We are always talking about acute effects, but I feel it would be interesting to see how it would be, when you use it during a complete training program. I think the field of oxygen still has a lot of potential for work to do.

Who is the right patient to treat with oxygen? Would it be helpful to get better outcomes?

I think it is very important to look at this as well.”

Q) O2matic on tracheostomy patients post Covid-19?

A)

Anja Rode, Global Product Manager, O2matic:

“I have never heard about it, but O2matic will deliver oxygen like a flowmeter, it’s a non-invasive ventilation.

So if the patient is receiving oxygen from a concentrator or from a flowmeter, you could also use O2matic.

If you would like to, please get in contact with me after the webinar and we can investigate and get you in contact with some of our medical advisors at the hospitals.”

Q) Do you see a relation between rehabilitation of COPD-patients and Post-COVID-patients?

A)

Tessa Schneeberger, Ph.d student, PT:

“I think that their breathing patterns are different but also from the whole pulmonary disease. As I also try to spell out, the results are the same. What we have seen in the COPD patients was also true in the covid patients. It was a really small trial and without the use of iso time, nothing was of statistical significance.”

Q) Have you had a look on the CO2 while the 6walk?

A)

Tessa Schneeberger, Ph.d student, PT:

“We did not investigate the CO2. We did not choose the 6 minutes walking test because as we saw in the video, it is a self-pace test. When you want to compare physiological parameters, it is always important that you know that the person has done the same pace, so that you can compare the values to each other. That is why we did not measure CO2 while doing the 6 minutes walk test. But when we measured the endurance shuttle walk test, there was no difference between constant titrated oxygen flow rate and the automatically titrated oxygen flow. The only thing that we have seen, is there was a correlation between the more oxygen you give, the more the CO2 levels will rise. So there was a correlation here, but it was true for both oxygenation systems.”

Q) If Dyspnea in 6MWT is significantly lower with automated titration, but walking distance is not that much better, reason could be training status of the patient in general?

A)

Linette Kofod, Ph.d student, PT:

“It is definitely low because they have a general low training status, but we made the 6 minutes walking test to test on the same day. These patients are used to a certain speed and they will use this speed when they are walking. Even though they have more air to walk, some of them might be walking a little bit faster, but not significantly faster. They would rather ease their breathing while they are walking. We do a 6mwt before and after rehabilitation where they have been exercising, therefore I think that the 6mwt would show an increase in distance over time, but when we do it the same day, the distance is difficult to measure. I think you should use Dyspnea as a parameter, when you test on the same day.”