

Supplemental material

Table 1: Clinical examination pre and post lockdown in relation to physical therapy

group 1: physiotherapy before and stop during lockdown (n=30)							
	pre lockdown		post lockdown		difference		p
	mean	SD	mean	SD	mean	SD	
BASMI							
Tragus-to-wall (cm)	11,2	± 1,29	11,2	± 0,84	0,0	± 1,46	0,919
Modified Shöber (cm)	14,2	± 0,87	14,5	± 1,02	0,4	± 0,98	0,035
Cervical rotation left (°)	80,0	± 8,75	80,1	± 12,65	0,1	± 12,57	0,956
Cervical rotation right (°)	79,5	± 10,50	79,7	± 13,56	0,2	± 14,00	0,94
Lumbar flexion left (cm)	18,0	± 4,08	17,8	± 4,24	-0,1	± 3,25	0,811
Lumbar flexion right (cm)	17,8	± 3,71	17,8	± 4,14	0,0	± 3,21	0,952
Intermalleolar distance (cm)	116,8	± 16,82	112,2	± 15,76	-4,6	± 12,00	0,058
Chest expansion (cm)	6,4	± 1,73	4,6	± 1,38	-1,8	± 1,95	≤0,0001

group 2: no physiotherapy before lockdown (n=32)							
	pre lockdown		post lockdown		difference		p
	mean	SD	mean	SD	mean	SD	
BASMI							
Tragus-to-wall (cm)	11,2	± 1,08	11,8	± 1,23	0,7	± 1,17	0,004
Modified Shöber (cm)	13,8	± 1,05	14,2	± 1,09	0,3	± 1,01	0,061
Cervical rotation left (°)	78,6	± 12,12	78,3	± 13,02	-0,3	± 10,77	0,895
Cervical rotation right (°)	78,4	± 12,74	74,5	± 19,61	-3,9	± 21,28	0,315
Lumbar flexion left (cm)	17,7	± 5,28	17,8	± 5,79	0,1	± 2,54	0,89
Lumbar flexion right (cm)	18,5	± 4,49	20,3	± 18,09	1,9	± 16,74	0,533
Intermalleolar distance (cm)	114,0	± 14,83	105,6	± 31,16	-8,4	± 28,55	0,12
Chest expansion (cm)	5,6	± 1,82	4,2	± 1,69	-1,4	± 1,64	≤0,0001

BASMI and Chest Expansion values before and immediately after lockdown. The group was split based whether or not they had physical therapy before the lockdown. Paired T-tests were used for comparison and with Bonferroni correction the level of significance was $\alpha=0.006$.

In group 2, the Tragus-to Wall measurement displayed a small yet significant difference pre and post lockdown but for the overall analysis, we focused on the combined significant findings in both group 1 and 2.

Table 2: Patient demographics in the lockdown SpA cohort and the BeGiant control group

	BeGiant cohort (n=202)	Lockdown SpA cohort (n=65)	p
Age, years, mean \pm SD	39,8 \pm 11,42	39,7 \pm 11,78	0,958
Gender (M/F)	106/96	37/28	
Body weight, kg, mean \pm SD	75,1 \pm 14,62	73,0 \pm 13,26	0,317
Body height, cm, mean \pm SD	173,0 \pm 9,15	174,6 \pm 8,88	0,256
BMI, kg/m ² , mean \pm SD	25,1 \pm 4,41	23,8 \pm 3,46	0,044
Disease duration, years, mean \pm SD	6,2 \pm 5,26	6,1 \pm 6,13	0,865
Symptom duration, years, mean \pm SD	9,5 \pm 8,24	10,7 \pm 9,39	0,31
CRP, mg/L, , mean \pm SD	3,4 \pm 3,96	3,1 \pm 3,72	0,712
ESR, mm/h, , mean \pm SD	8,6 \pm 8,06	8,5 \pm 7,03	0,982
Tender/swollen joint count (%)	18,9 / 4,5	19,6 / 1,50	
Current NSAID use index (%)	22,3 \pm 36,4	36,7 \pm 47,08	
Current DMARD's use (%)	15,3	6,1	
Current biologicals use (%)	34,7	40	
BASMI total	2,1 \pm 0,88	1,9 \pm 0,85	0,063
BASDAI total	3,3 \pm 2,25	3,1 \pm 1,95	0,543
BASFI total	2,1 \pm 2,00	1,9 \pm 1,83	0,41
ASDAS total	1,9 \pm 0,92	2,0 \pm 0,73	0,832

N=number of patients, SD= standard deviation, M= male, F= Female, BMI= body mass index, CRP= C-reactive protein, ESR= erythrocyte sedimentation rate

The online questionnaire : INFLUENCE OF COVID-19 LOCKDOWN ON PHYSICAL CONDITION.

1. Questions regarding physical therapy and exercise therapy

Before lockdown I received physical therapy yes / no

I received therapy regularly / irregularly, based on existing complaints

Treatment frequency 1x/month
 2x/month
 1x/week
 2x/week
 3x/week
 5x/week

Which type of therapy did you receive ?
(multiple answers possible) massage therapy
 electrotherapy
 mobilization/ manipulation
 exercise therapy
 other :

Before lockdown I exercised at home yes / no

I exercised regularly / irregularly

Frequency of exercises 1x/month
 2x/month
 1x/week
 2x/week
 3x/week
 5x/week

I used an exercise program composed by myself
 composed by my physical therapist
 from an online platform

During lockdown I still visit my physical therapist
 I can't visit my physical therapist anymore
 I receive digital guidance from my PT
 not applicable

Since /...../.....

During lockdown I exercise at home by myself, like before
 I now exercise at home by myself
 I don't exercise

During lockdown, I use an exercise program composed by myself
 composed by my physical therapist
 from an online platform

2. Questions regarding sports activities

Before lockdown I performed sports activities yes / no

- I performed my sports
(multiple answers possible)
- alone
 - with friends
 - in a sportsclub
 - with a patient group

Which sport(s) did you practice ?

.....

Minutes per practice

Times/month

- During lockdown
- I can still practice my sport
 - I can't practice my sport anymore, but I perform a different sports activity
 - I don't practice sports (anymore)
 - I started practicing sports

- During lockdown, I now
- walk
 - run
 - bike
 - other:

Minutes per practice

Times/month

I use an activity monitor or a pedometer yes / no

Are you willing to share the data from your activity monitor or pedometer ? yes / no

3. Work related questions

Before lockdown I performed a paid job yes / no

- My job consisted
- mainly out of manual labor (> 60%)
 - mainly out of mental work (>60%)
 - a combination of manual and mental work

- I worked
- full-time
 - part-time because of my rheumatic disease
 - part-time because of other health condition
 - part-time because of other reasons

- My job situation was
- officer
 - worker
 - clerk
 - self employed

- independent professionals
 other:
- During lockdown
- I can keep working as usual
 I can work from home now
 I can't work anymore
 not applicable
- Now that I working at home
- I stand more than usual
 I sit more than usual
 I move around more than usual
- Working at home
- I can do this as ergonomical as at the office
(e.g. office chair and desk)
 I can do this less ergonomical than at the
office (e.g. kitchen chair and table)
- 4. Questions regarding medication use**
- During the lockdown, I changed my medication use
- yes, because of the COVID-19 pandemic
 yes, but not linked to the COVID-19
pandemic
 not applicable
- During lockdown my use of NSAID's was
- unchanged
 increased
 diminished
 stopped
 not applicable
- The NSAID's I take are
- aceclofenac
 celecoxib
 diclofenac
 etoricoxib
 ibuprofen
 indomethacine
 meloxicam
 nabumeton
 naproxen
 piroxicam
 proglumethacine
 tenoxicam
 other:
- NSAID dosis
- <1day/week
 1-3days/week
 3-5days/week
 >5days/week
 daily

Average daily dosis mg
Start date/...../.....
Stop date/...../.....
During the lockdown my use of analgetics was	<input type="checkbox"/> unchanged <input type="checkbox"/> increased <input type="checkbox"/> diminished <input type="checkbox"/> stopped <input type="checkbox"/> not applicable
The analgetics I take are	<input type="checkbox"/> paracetamol <input type="checkbox"/> tramadol <input type="checkbox"/> other:
analgetics dosis	<input type="checkbox"/> <1day/week <input type="checkbox"/> 1-3days/week <input type="checkbox"/> 3-5days/week <input type="checkbox"/> >5days/week <input type="checkbox"/> daily
Average daily dosis mg
Start date/...../.....
Stop date/...../.....
During the lockdown my use of corticoids was	<input type="checkbox"/> unchanged <input type="checkbox"/> increased <input type="checkbox"/> diminished <input type="checkbox"/> stopped <input type="checkbox"/> not applicable
The glucocorticoids I take are	<input type="checkbox"/> methylprednisolone <input type="checkbox"/> prednisolone <input type="checkbox"/> other:
The glucocorticoids dosis	<input type="checkbox"/> <1day/week <input type="checkbox"/> 1-3days/week <input type="checkbox"/> 3-5days/week <input type="checkbox"/> >5days/week <input type="checkbox"/> daily
Average daily dosis mg
Start date/...../.....
Stop date/...../.....
During lockdown my use of DMARD's was	<input type="checkbox"/> unchanged <input type="checkbox"/> increased <input type="checkbox"/> diminished <input type="checkbox"/> stopped <input type="checkbox"/> not applicable

- The DMARD's I take are
- leflunomide
 - methotrexate
 - sulfasalazine
 - other:
- DMARD's dosis
- <1day/week
 - 1-3days/week
 - 3-5days/week
 - >5days/week
 - daily
- daily or weekly dosis
- mg/day or mg/week
- During the lockdown my use of biologicals was
- unchanged
 - increased
 - diminished
 - stopped
 - not applicable
- The biologicals I take are
- adalimumab
 - certolizumab-pegol
 - etanercept
 - golimumab
 - infliximab
 - secukinumab
 - other:

5. Questions regarding your health perception

How would you describe your current general health compared to before lockdown ?

- much better now
- a little better now
- about the same
- a little worse now
- much worse now

How would you describe your current morning stiffness compared to before lockdown ?

- much better now
- a little better now
- about the same
- a little worse now
- much worse now

How would you describe your current joint stiffness and stiffness in the back now compared to before lockdown ?

- much better now
- a little better now
- about the same
- a little worse now
- much worse now

How would you describe the hand-floor distance when you bend over with straight legs ?

- much better now
- a little better now
- about the same
- a little worse now
- much worse now

How would you describe your current muscle strength compared to before lockdown ?

- much better now
- a little better now
- about the same
- a little worse now
- much worse now

How would you describe your current general physical fitness compared to before lockdown ?

- much better now
- a little better now
- about the same
- a little worse now
- much worse now

6. Questions regarding perceiving covid-19 symptoms

Do you suspect you had COVID-19 infection symptoms during lockdown ? yes / no

Which symptoms did you experience ?

- fever
- shortness of breath
- dry cough
- pain in chest area
- muscle pain
- other:

Are you willing to visit the hospital after the lockdown for a short visit to evaluate the mobility of your joints and spine ? yes / no