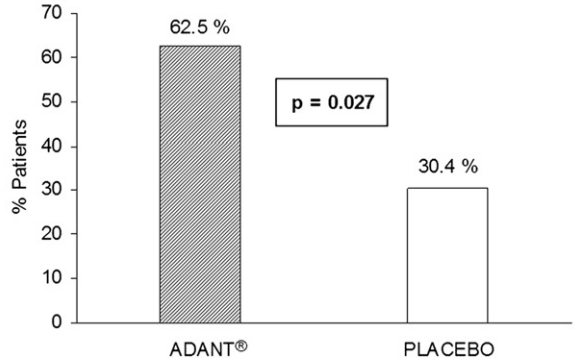
Table 1. OA Baseline characteristics of patients studied for JSW evolution (N=183).

	Adant® (n=98)	Placebo (n=85)	p value
Knee evaluated			
Right (%)	45.9	52.9	ns
Left (%)	54.1	47.1	ns
Kellgren Grade			
II (%)	70.4	76.5	ns
III (%)	29.6	23.5	ns
Months OA evolution (median)	4.1	5.5	ns
JSW (mm) (mean)	3.57	3.56	ns

Figure 1. Statistical association between clinical improvement (OARSI 2004) and reduction of JSW at the end of the study.



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EVALUATION OF THE EFFECT OF ADDING CORTICOSTEROID TO VISCOSUPPLEMENTATION: A PROSPECTIVE AND RANDOMIZED STUDY

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Purpose: The aim of this study is to assess if we can improve the initial results of viscosupplementation by the addition of corticosteroids to the procedure, watching for any interference on the long-term results.
Methods: We evaluated 104 patients with knee osteoarthritis (OA), treated at the group for the treatment of osteometabolic diseases of IOT-FMUSP, São Paulo. All patients were receiving usual care for OA, and those who underwent to any kind of intraarticular injection or knee surgery in the last 6 months, or presented post-traumatic or rheumatoid arthritis were not included into the protocol. We applied the visual analogic scale of pain (VAS) and the algofunctional questionnaires WOMAC and Lequesne. Patients were randomized into two groups of 52 patients each. Group 1 received a single intraarticular injection of the knee with 6ml of Synvisc One (Hylan GF-20) alone. Patients in group 2 received an intraarticular injection of the knee with 6ml of Synvisc One (Hylan GF-20) and 1ml (20mg) of Hexacetonide Triamcinolone. The questionnaires were applied prior to the injection (week zero) and at weeks 1, 4, 12 and 24 after the procedure.
This study was aproved by the University of São Paulo Clinics Hospital's ethics committee and entirely funded by FAPESP (Cientific research support foundation) - Grant number 2010/11450-9. It can be accessed at clinicaltrials.com.
Results: The patient's characteristics of the two groups were compared with chi-square and Fisher's exact tests and were considered homogeneus. Most patiens were female (76%). The mean age was 62,7 years old. The average BMI of patients was 29.52. Most patients (34,6%) had a level 3 Kellgreen and Lawrence radiological classification for knee OA.
The pre-injection scores were:
Group 1- WOMAC = 50,21 (SD = 16,15); VAS = 67,27 (SD = 20,08); Lequesne = 13.24 (SD = 3,85).
Group 2- WOMAC = 54,54 (SD = 17,58); VAS = 70,21 (SD = 23,59); Lequesne = 13.86 (SD = 4,18). These results were statistically compared and there was no statistic difference between groups.
At Week 1, Group 2 showed a marked reduction for WOMAC and VAS scores, with a statistically significant difference compared with week zero and also when compared with Group 1 week one results. At week 4, group 2 still had better results for WOMAC and VAS compared to group 1, but with a $p>0,05$.
The WOMAC and VAS results for weeks 12 and 24 were similar within the 2 groups.
The Lequesne results had no statistically significant difference between the 2 groups at any moment. However, each group had a statistically significant improvement at weeks 1, 4, 12 and 24 compared to the baseline.
Results are shown in tables and graphics below:

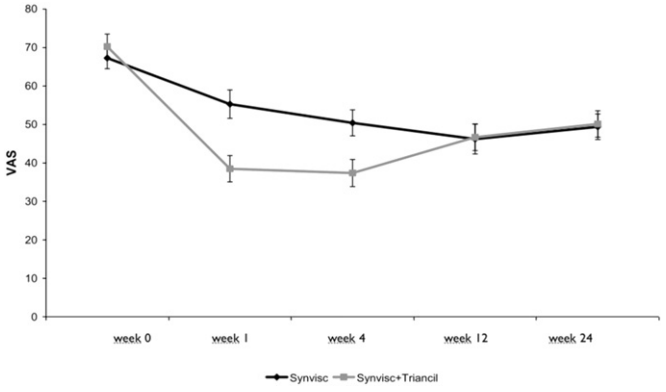
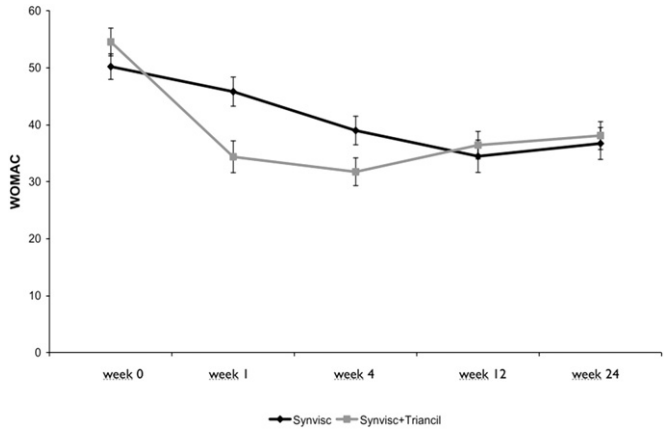


Table 1
Results

SCORE	WEEK	MEAN (Group 1)	SD (Group 1)	Confidence interval (95%)	N (Group 1)	MEAN (Group 2)	SD (Group 2)	Confidence interval (95%)	N (Group 2)
WOMAC	0	50,21	16,15	45,71 - 54,71	52	54,54	17,58	49,65 - 59,43	52
WOMAC	1	45,83	18,52	40,67 - 50,98	52	34,38	20,04	28,81 - 39,96	52
WOMAC	4	39,00	17,87	33,97 - 44,03	51	31,75	17,58	26,86 - 36,64	52
WOMAC	12	34,48	19,25	28,76 - 40,19	46	36,43	16,50	31,58 - 41,27	47
WOMAC	24	36,72	19,05	31,06 - 42,37	46	38,11	16,72	33,20 - 43,01	47
VAS	0	67,27	20,08	61,68 - 72,86	52	70,21	23,59	63,64 - 76,78	52
VAS	1	55,29	26,52	47,91 - 62,67	52	38,52	24,65	31,66 - 45,38	52
VAS	4	50,41	24,10	43,63 - 57,19	51	37,40	25,24	30,38 - 44,43	51
VAS	12	46,22	26,18	38,44 - 53,99	46	46,70	23,51	39,71 - 53,68	47
VAS	24	49,41	21,94	42,74 - 56,08	44	50,15	23,46	43,26 - 57,04	47
LEQUESNE	0	13,24	3,85	12,17 - 14,31	52	13,86	4,18	12,69 - 15,02	52
LEQUESNE	1	11,86	4,05	10,74 - 12,99	52	10,93	4,73	9,61 - 12,25	52
LEQUESNE	4	10,96	4,13	9,80 - 12,12	51	9,70	4,12	8,55 - 10,85	52
LEQUESNE	24	10,32	4,27	9,02 - 11,62	44	11,45	3,70	10,36 - 12,53	47



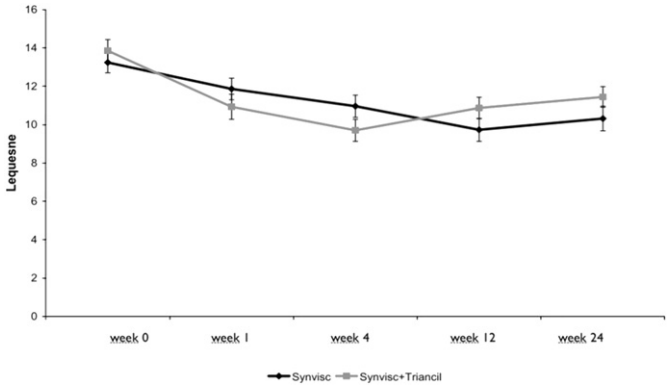


Table 2
WOMAC comparison.

GROUP	COMPARISON	Mean difference	Confidence interval (95%)	p
1	week 0 vs week 1	4,38	-2,23 - 11,00	0,52
1	week 0 vs week 4	11,46	2,93 - 19,99	0,001
1	week 0 vs week 12	15,56	5,79 - 25,32	<0,001
1	week 0 vs week 24	13,38	2,94 - 23,82	0,002
2	week 0 vs week 1	20,15	13,54 - 26,77	<0,001
2	week 0 vs week 4	22,79	14,30 - 31,28	<0,001
2	week 0 vs week 12	17,08	7,37 - 26,78	<0,001
2	week 0 vs week 24	15,76	5,39 - 26,14	<0,001
WEEK 0	group 1 vs group 2	-4,33	-15,45 - 6,80	0,966
WEEK 1	group 1 vs group 2	11,44	0,32 - 22,56	0,038
WEEK 4	group 1 vs group 2	7,00	-4,16 - 18,15	0,602
WEEK 12	group 1 vs group 2	-2,81	-14,32 - 8,71	0,999
WEEK 24	group 1 vs group 2	-1,94	-13,60 - 9,71	>0,999

Table 3
VAS Comparison.

GROUP	COMPARISON	Mean difference	Confidence interval (95%)	p
1	week 0 vs week 1	11,98	1,67 - 22,29	0,009
1	week 0 vs week 4	17,03	4,26 - 29,81	0,001
1	week 0 vs week 12	21,17	7,00 - 35,34	<0,001
1	week 0 vs week 24	17,39	2,47 - 32,30	0,009
2	week 0 vs week 1	31,69	21,38 - 42,00	<0,001
2	week 0 vs week 4	32,81	20,10 - 45,52	<0,001
2	week 0 vs week 12	23,30	9,14 - 37,46	<0,001
2	week 0 vs week 24	19,87	5,16 - q 34,57	0,001
WEEK 0	Group 1 vs Group 2	-2,94	-17,82 - 11,94	>0,999
WEEK 1	Group 1 vs Group 2	16,77	1,89 - 31,65	0,014
WEEK 4	Group 1 vs Group 2	12,83	-2,10 - 27,77	0,164
WEEK 12	Group 1 vs Group 2	-0,81	-16,38 - 14,75	>0,999
WEEK 24	Group 1 vs Group 2	-0,46	-16,26 - 15,33	>0,999

Table 4
Lequesne Comparison.

GROUP	COMPARISON	Mean difference	Confidence interval (95%)	p
1	week 0 vs week 1	1,38	-0,15 - 2,90	0,117
1	week 0 vs week 4	2,22	0,25 - 4,18	0,014
1	week 0 vs week 12	3,38	1,14 - 5,63	<0,001
1	week 0 vs week 24	2,80	0,38 - 5,21	0,010
2	week 0 vs week 1	2,92	1,40 - 4,45	<0,001
2	week 0 vs week 4	4,15	2,20 - 6,11	<0,001
2	week 0 vs week 12	2,84	0,60 - 5,08	0,003
2	week 0 vs week 24	2,27	-0,11 - 4,66	0,076
WEEK 0	Group 1 vs Group 2	-0,62	-3,16 - 1,93	0,999
WEEK 1	Group 1 vs Group 2	0,93	-1,62 - 3,48	0,977
WEEK 4	Group 1 vs Group 2	1,32	-1,23 - 3,88	0,824
WEEK 12	Group 1 vs Group 2	-1,16	-3,80 - 1,48	0,927
WEEK 24	Group 1 vs Group 2	-1,14	-3,83 - 1,55	0,942

None of the individuals characteristics such as age, genre, BMI or Kellgreen and Lawrence classification had any effects on the results. Adverse effects were: 4,8% of the patients presented effusion and 19,2% of the patients related discomfort or pain. There was no statistic difference between the groups.

Conclusion: We concluded that the addition of 1ml of triancinolone to viscosupplementation brings great improvement to its early results and does not affect the long-term results, so it should be performed.<br

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MUSCLE STRENGTH AND MUSCLE MASS ONE YEAR AFTER AN INITIAL 16 WEEK INTENSE WEIGHT LOSS: A RANDOMIZED CONTROLLED TRIAL

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Purpose: Knee osteoarthritis (OA) and muscle weakness often coexist and lower muscle strength and less muscle mass pose possible detrimental effects on physical function and changed muscle metabolism. In obese OA patients this is particularly important because reductions in muscle strength and lean mass are known as unsolicited side effects of weight loss. Thus, participation in exercise regimens following weight loss is advocated in the clinic to maintain muscle strength and lean mass. The purpose of this study was to investigate the effect of a one year exercise treatment following an intense weight loss compared to dietary counselling or no attention (control) on leg muscle strength and lean mass.

Methods: A population of obese patients above 50 years of age with knee OA (ACR criteria) was included in an intense 16 weeks weight loss intervention (NCT NCT00655941). After weight loss, patients were randomized to one of three groups; a supervised/home based Exercise program, continuous Dietary support, or a no attention Control group for one year. The exercise programme consisted of 3 training sessions/week, gradually translating the intervention from facility based exercises to home based sessions. At baseline (pre weight loss) and 1 year post weight loss (68 weeks) patients had their body composition analyzed using dual energy X-ray absorptiometry (DXA) scans together with isometric knee muscle strength and a self reported symptomatic outcome score (KOOS). The average of 4 out of the 5 KOOS subscales, excluding sports and recreation subscale, were used. Changes from baseline to one year follow-up were compared between groups using analysis of covariance (ANCOVA) with a factor for group, adjusting for baseline values of the outcome measure.

Results: 171 patients (80% females), 62.7 years of age and BMI 37.3 kg/m^2 were included, which at baseline had complete DXA scan and muscle strength data. The randomization procedure on this "Muscle strength subsample" resulted in 59, 57 and 55 patients in groups C, D and E, respectively. After 1 year, 145 patients (85% of baseline) completed the study (Table 1). Group E did not achieve a statistically significant greater increase in muscle strength compared to Group D and Group C (Table 2). Similar results were found for lean body mass and KOOS4 (Table 2). While Group E achieved a lower loss of total body weight (MD: D vs. E; -4.8 kg [CI