

Educating rheumatologists may lead to more disease parameters and treating to a target in psoriatic arthritis and spondyloarthritis. Results from the Metrix II study

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Background

- ❖ Treating to a target is well established in RA where more patients have lower disease activity vs. routine care¹
- ❖ We have previously found that educating rheumatologists and bench marking their chart audits compared to others in RA² resulted in
 - ❖ more systematic assessments and
 - ❖ more treatment changes in patients who were not in a low disease state
- ❖ The data of treating to a target in seronegative arthritis such as psoriatic arthritis (PsA) and spondyloarthritis (SpA) for targeted assessments improving outcomes are less definitive
- ❖ A recent RCT showed that in early PsA treating to a target improved outcomes compared to usual care³
- ❖ Some studies suggest that delays in Rx in SpA can affect outcomes⁴

Objectives

- ❖ To determine if comparative chart audits in PsA and SpA and needs based small group learning can improve systematic measurements in PsA and SpA and result in more appropriate treatment changes

Methods

- ❖ Rheumatologists who were members of the Ontario Rheumatology Association (ORA) were invited to participate in this study
- ❖ Participants performed consecutive chart audits on 10 PsA and 10 SpA patients completing a standardized form for each disease
- ❖ They completed a needs based survey and participated in an accredited investigators' meeting which presented results from each doctor comparatively and each participant was blinded to others' results (identification of who were the other doctors, i.e. doctors were recorded as A to J) and each rheumatologist knew only who they were but saw all the comparative data
- ❖ New data on treatment and treating to a target and assessing outcomes in PsA and SpA were presented and discussed
- ❖ Then 8 months later a repeat chart audit on 10 serial PsA and 10 SpA was performed by each rheumatologist and control rheumatologists who did not receive the intervention were invited to also do the chart audit (Comparison group)
- ❖ A final accredited meeting was held to discuss results, present new knowledge from recent meetings for PsA and SpA and determine future small group learning needs
- ❖ The University of Western Ontario accredited the program
- ❖ Comparative statistics were performed pre and post intervention on the results of the chart audit and compared to the control group who did not receive the intervention
- ❖ Funding was from AbbVie, CIORA and AMOSO (Academic Medical Organization of Southwestern Ontario)

Results

Table PsA data for intervention and control group

Variables	Pre Intervention	Post Intervention	Controls (% Intervention)
N	80	80	25
% Males	42	46	54
Mean Disease Duration (years)(0-45)	18.2	6.7	4.5
% with investigation over for revision	87	74	100
% with revision	34	26	24
% with data on evaluations recorded	88	93	100
% with subcutaneous	9	11	22
% with Measure of skin involvement	80	73	89
% with Psoriasis measured	89	79	94
% with Dactylitis	86	6	27
% with CRP in last 3 months	79	79	97
Mean CRP (0-20)	4.9 (0-54.5)	3.9 (0-2.42)	5.1 (0-341.2)
% with ESR in last 3 months	71	68	97
Mean ESR (0-65)	14.4 (0-64)	19.3 (2-61)	15.9 (1-62)
% with either CRP or ESR in last 3 months	79	73	97
% with TJC in last 3 months	91	96	100
Mean TJC (0-32)	2.9 (0-25)	2.2 (0-32)	3.1 (0-42)
% with SJC in last 3 months	96	95	100
Mean SJC (0-25)	2.3 (0-25)	2.2 (0-24)	2.2 (0-42)
% with Patient Global	94	94	99
Mean Patient Global (0-10)	5.3	5.8	5.5
% with HAQ done	70	66	27
Mean HAQ	0.63	0.68	0.86
% with MRG Global	66	68	71
Mean MRG Global (0-10)	2.5	2.3	2.9
% with Composite Score Calculated	28	28	66
Mean CRAS (0-39)	8.7 (0-35)	5.8 (0-21)	11.9 (0-39)
Continued smoking			
Metrix (n)	40	35	43
SSZ (%)	8	12	21
Leflunomide (%)	11	16	45
Steroids (%)	8	8	2
Biologics (%)	45	31	46
% with Steroids given at current visit (in, in or po)	15	10	27
% with DMARD change at current visit	29	25	29

SpA patients pre and post intervention and control group

Variables	Pre Intervention	Post Intervention	Controls (% Intervention)
N	84	76	25
% Males	68	61	54
Mean Disease Duration (0-25)	12.5 (0-25)	10.9 (0.5-40)	10.8 (1-50)
Diagnosis	64	66	54
% with AS			
% with spondyloarthritis	31	20	31
Sacroiliitis diagnosed	66	31	54
% with pain New	44	30	43
% with modified Schober score	79	75	91
% with walk to outpatient measured	79	63	91
% with lateral flexion done	46	33	54
% with chest wall expansion done	42	28	91
% with CRP in last 3 months	53	61	99
Mean CRP (0-10)	4.8 (0-23.5)	4.2 (0-2.20)	10.1 (0.1-107)
% with either CRP or ESR in last 3 months	58	61	99
% with TJC in last 3 months	95	99	100
Mean TJC (0-20)	8.4 (0-18)	8.7 (0-20)	1.7 (0-12)
% with MRG in last 3 months	96	99	100
Mean SJC (0-17)	0.7 (0-13)	0.3 (0-7)	0.9 (0-8)
% with Patient Global	61	59	94
Mean Patient Global (0-10)	3.9 (0-6)	4.0 (0-10)	2.8 (0-10)
% with HAQ done	64	41	6
% with BASDAI done	81	79	43
Mean BASDAI (0-9.6)	4.1 (0-6)	3.9 (0-9.3)	3.5 (1.4-8.7)
% with MRG Global	88	94	71
Mean MRG Global (0-10)	3.3 (0-4)	3.2 (0-6)	2.4 (0-6)

Intervention: 9 rheumatologists Controls: 3 rheumatologists
 Post intervention, for PsA, there was no change in SJC (96%), TJC (≥91%), ESR (≥70%) and CRP (≥73%).

MD (79% vs. 89%) and patient global (65% to 75%) increased
 HAQ decreased (76% to 56%).

At follow up, fewer in the PsA group stopped methotrexate and there was less steroid use.

Table. Treatment of SpA

Variables	Pre Intervention	Post Intervention	Controls (% Intervention)
NSAID (%)	50	53	63
MTX (%)	8	11	6
SSZ (%)	5	6	14
Steroids (%)	0	2	2
Biologics (%)	40	41	46
% with Rx change at current visit	20	20	14

Conclusions

- ❖ Behaviour did not change much pre vs. post intervention group and was similar to control group
- ❖ There were some differences in PsA but not SpA pre and post intervention

Limitations

- ❖ Data on treating to a target in PsA and especially SpA were sparse
- ❖ There is no agreed upon target in these diseases
 - ❖ It is not feasible to repeatedly image for disease activity in SpA
 - ❖ The BASDAI may not be related to disease activity
 - ❖ In PsA should the target include skin, nails and other non-joints such as dactylitis and enthesiitis
- ❖ The control group may not have been comparable and were not randomized and numbers were small
- ❖ Maybe this mostly negative study reflects lack of data, lack of face validity for a target in seronegative arthritis and / or a care gap

References

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