Abstract A6.8 Table 1

Patient	Sex	Age	Type	RF	ANA	Uveitis	Swollen joints
1	Female	10	Systemic	Negative	Positive	No	Knee
2	Female	13	Polyarticular	Negative	Negative	No	Knee and wrists
3	Male	10	Systemic	Positive	Positive	No	Knee and wrists
4	Female	10	Polyarticular	Negative	Negative	No	Temporomandibular and wrists
5	Female	11	Polyarticular	Negative	Negative	No	Wrists and metatarsophalangeal
6	Male	7	Oligoarticular	Negative	Negative	No	Ankles
7	Male	7	Oligoarticular	Negative	Negative	No	Knees
8	Female	5	Oligoarticular	Negative	Positive	Yes	Knees
9	Female	6	Oligoarticular	Negative	Negative	No	Ankles

from diagnosis to initiation of biological therapy was 3.94 ± 2.83 years. The disease characteristics are detailed in the table.

All the children had previously received DMARDs (66.6% methotrexate (MTX) and 33.3% MTX and sulfasalazine). Eight of the 9 patients (88.9%) were taking corticosteroids at baseline. Eight received etanercept (ETN) and one Adalimumab (ADA), with good outcomes in all the patients unless 1 that had to switch from ETN to ADA due to inefficacy, and improved after the change. The steroids were suspended in 75% of children (6). Differences between mean values of CRP, ESR, and platelets from baseline to actual moment were statistically significant.

The median biologic time is 4 (1.11) years.

Actually all the children are in remission, two of them (patients 1 and 4) without biological treatment or classic DMARDs (since 5 and 2 years respectively).

None of the children have had significant adverse effects nor required hospitalisation from the beginning of therapy.

Discussion ETN has proved its efficacy in JIA (regardless of the type of onset), as it has been reported in multiple efficacy and safety studies, including long term studies of up to eight years of continuous therapy. [1, 2]

We present our experience in children treated with up to 11 years, with good outcomes in terms of efficacy and safety in all the patients, and also 2 patients still in remission after 2 and 5 years without treatment.

References

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A6.9 DIRECTED TRANSPORT OF MICRORNAS FROM APOPTOTIC CELLS TO PHAGOCYTES BY MEMBRANE-COATED VESICLES (MCVS)

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Background and Objectives A distinctive feature of cell activation and apoptotic cell death is the formation of MCVs. MCVs have previously been identified as mediators of cell-to-cell communication and are recognised as carriers of microRNA. An impaired clearance of apoptotic debris has been observed in SLE patients. This is caused by an increased rate of apoptosis and by a defect in phagocytic-cell clearance.

We investigated differences in the microRNA content of MCVs released by activated and apoptotic lymphoblasts from normal healthy donors (NHDs) and SLE patients. MicroRNA content of lymphoblasts and MCVs and the effect of MCV uptake into monocytes were analysed.

Materials and Methods Activated lymphoblasts, UV-B irradiated lymphoblasts and corresponding MCVs of NHDs and SLE patients were compared in an Agilent microRNA array and validated by qPCR MiR-155 expression was determined by qPCR in monocytes with engulfed autologous UV-MCVs. Western blot was performed to investigate the expression of the miR-155 target protein Tab-2.

Results MiR-155, miR-155*, miR-34b and miR-99a were significantly less expressed in UV-lymphoblasts compared to non-irradiated lymphoblasts. The effect was even more pronounced in staurosporine-treated lymphoblasts. In contrast, the expression of miR-34a increased after UV-B irradiation but decreased under staurosporine treatment. The comparison of viable and apoptotic MCVs showed a decrease of miR-155* in apoptotic MCVs. In UV-MCVs, the miR-99a level was higher compared to viable MCVs. MiR-155 was not altered in MCVs after apoptosis induction. MiR-34a was expressed at higher levels in viable SLE lymphoblasts and MCVs compared to NHDs. In contrast, miR-34b expression was decreased in UV-lymphoblasts and UV-MCVs of SLE patients. In functional assays we could demonstrate higher miR-155 levels and consecutively decreased target protein levels in monocytes after engulfment of autologous UV-MCVs.

Conclusions Our data show an unequal distribution of the content of different microRNAs within apoptotic cells and cell derived MCV. This suggests a directional transport rather than a random distribution. Thus, cells can regulate their microRNA as well as the microRNA content within released MCV. We could show that microRNA and protein expression changes in phagocytes after UV-MCV engulfment. Thus, our results suggest that MCVs could serve as a transport vehicle for microRNAs to mediate cell-cell communication and influence intracellular processes in the phagocyte. Disturbances of this system could contribute to the pathogenesis of SLE.

A6.10 HIGH DISEASE ACTIVITY AND EROSION RATE IN SUDANESE RHEUMATOID ARTHRITIS PATIENTS

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Background and Objectives Reports from Nigeria claim that rheumatoid arthritis (RA) in Western Africa has relatively low disease activity with a 29 occurrence of hand erosions No data are published on RA in Sudan and our aim was to collect a first Sudanese RA cohort for comparative studies.

Materials and Methods 264 consecutive patients (87% females) with RA according to the 1987 ACR criteria attending two