and other nucleic acid sensing TLRs was quantified by RT-PCR and Western blotting; activation (phosphorylation) of various signal transduction molecules was determined by Western blotting. Furthermore, the role of TLR9 in osteoclast differentiation and activation was investigated *in vitro*.

Results: The TLR9 antagonist significantly reduced clinical signs of arthritis by approximately 50%. Histological analyses revealed diminshed inflammation, cartilage degradation, bone erosion and significantly reduced numbers of osteoclasts in animals treated with the TLR9 antagonist. However, when treatment was started after onset of arthritis TLR9 inhibition had no effect on arthritis development and severity. IL-6 serum levels were greatly diminished in animals treated with the TLR9 antagonist and expression and activation of NF-kB in lymph nodes was reduced. Remarkably, mRNA levels of TLR7 and TLR9 strongly differed in the course of *in vitro* osteoclastogenesis. Whereas TLR7 expression did not change throughout osteoclastogenesis, expression of TLR9 was higher in precursor cells than in mature osteoclasts and stimulation with a TLR9 agonist (CpG) completely inhibited osteoclastogenesis.

Conclusions: Taken together, the results suggest an important role for TLR9 in the T cell-dependent initiation phase of PIA and thus important involvement of endogenous DNA released during apoptosis, necrosis or netosis in the initiation of autoimmune arthritis and during osteoclastogenesis. The possible relevance of these findings for human RA needs to be further elucidated in future experiments.

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THURSDAY, 15 JUNE 2017

To be and to become: transition from paediatric to adult care

OP0195 WHAT IS THE IMPACT OF JUVENILE IDIOPATHIC ARTHRITIS IN ADULTHOOD? THE MONOCENTRIC EXPERIENCE OF 240 PATIENTS FOLLOWED IN A TRANSITION TERTIARY CLINIC OF RHEUMATOLOGY

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Background: There are many differences in clinical manifestations, assessment and management of Juvenile Idiopathic Arthritis (JIA) between childhood and adults' arthritis onset. The transition from pediatric to the adult care emphasizes a lot of aspects that need to be addressed.

Objectives: To describe the long-term outcome of JIA.

Methods: Two-hundred and forty patients affected by JIA and referred to a transition care rheumatology tertiary centre were considered between 1999 and 2016. The outcome assessment included disease activity, medications, number of prosthesis implantation, pregnancy, mortality, social integration (mobility, employment status and educational level).

Results: Seventy-four (30.8%) males and 166 (69.2%) females were included; 53 (22.1%) patients were lost in follow up. Subtypes of JIA at disease onset included 101 oligoarthirtis (42.1%), 67 polyarthritis (27.9%), 43 systemic arthritis (17.9%), 7 psoriatic arthritis (2.9%), 22 enthesitis related arthritis (9.2%). Forty-eight (20%) patients had persistent uveitis. Ninety-three implant prosthesis and 14 arthodesis were recordered. The average disease duration was 20 years, the median age of the patients was 27 (18–57) years. Five deaths (2.1%) occurred in this cohort. At follow up 117 (48.7%) had low active disease activity, 70 (29.2%) had moderate disease activity, 14 (5.8%) had a high disease activity, 24 (10%) were on remission ON medication and 15 (6.3%) OFF medication. Among patients still on medication, 59 (24.6%) were treated with oral steroids, 18 (7.5%) with csDMARDs and 169 (70.4%) with bDMARDs. Seventy-five (31.3%) patients had a higher educational level (university), 195 (81.3%) had an employment, 128 (53.3%) had a driving license. Twenty-one (8.8%) pregnancies were registered. The transition age was considered after age of sixteen years old. In this contest, it was important the multidisciplinary approach of each patient that was realized with the collaboration of other specialists (ophthalmologist, orthopedic, dermatologist, obstetric, psychologist).

Conclusions: In the era of biologic therapy there was an important improvement in a lot variables of the long-term outcome of JIA. One-hundred-eighty-seven (77.9%) patients were still in tight control, not only because of the continuation of the biological therapy but also because of the multidisciplinary care carried out even during remission. JIA often persists over the adulthood. The long term follow up and care of these patients has to be conducted by a rheumatologist expertized in JIA in collaboration with other specialists.

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Heterogeneity in JIA

OP0196 CHANGING PATTERNS OF JUVENILE IDIOPATHIC ARTHRITIS PATIENTS TREATED WITH ETANERCEPT FROM 2000 TO 2016 IN THE GERMAN BIKER REGISTRY POPULATION

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Background: There is increasing experience with Etanercept (ETA) in juvenile idiopathic arthritis in the BIKER Registry.

Objectives: To report on practice changes ETA utilization and outcome over a period of 16 years.

Methods: 6 cohorts of pts were created according to inclusion period. Patients' and disease characteristics,the utilization of DMARDs, steroids, NSAIDs were analysed. Efficacy was judged by PedACR30/50/70/90, JADAS and ACR-remission.

Results: Records from 2105 JIA pts treated with etanercept with at least a baseline and one follow up form were analysed. Most pts were females (67%). The median age of disease onset increased from 5.9 years in the early to 9.3 years in the later cohorts while age at start of treatment remained stable (about 13 years). Median disease duration markedly decreased from 5.3 to about 2 years. Most pts had RF neg. polyJIA followed by extended oligoarthritis. In the more recent cohorts the rate of enthesitis related arthritis increased and the rate f systemic JIA decreased (table). At registry start, 20% of newly enrolled pts belonged to the systemic JIA category compared to <1% in 2016. During the study period, the overall utilization of glucocorticoids at baseline decreased from 54% to 19% ($P<0.0001$), NSAID from 90% to 72% ($P<0.0001$), MTX from 78% to 64% ($P=0.004$). ACR30/50%70/90 response rates at month 12 were 80%/74%/59%/40% and did not vary over time while the rate of patients reaching no active joint/CHAQ DI=0/JADAS-MDA/JADAS-Remission/ACR-Remission increased from 43%/35%/44%/19%/41% to 69%/48%/45%/26%/63%.

Abstract OP0196 – Table 1

Year	2000–2002 N=248	2003–2005 N=337	2006–2008 N=444	2009–2011 N=462	2012–2014 N=436	2015–2016 N=178
Disease duration (y)	6.1±4.0	5.1±4.0	4.2±3.7	3.7±3.0	3.3±3.1	3.4±3.0
JIA category (%)	20.6	12.2	4.3	3	1.4	0.6
Sys JIA	25.8	31.8	32.9	36.6	33	33.7
RFneg PA	12.5	11.0	8.1	8	3.7	9.0
RFpos PA	2.4	4.5	6.1	6.1	3.4	5.1
PersOA	18.1	13.1	21.4	22.3	21.3	21.9
Ext OA	9.7	14.7	16.4	13.6	26.1	22.5
ERA	4.8	8.9	7.7	7.8	8	4.5
PsA unclass JIA	6	3.6	3.2	2.6	3	2.8
Uveitis	12.1	5.7	10.2	5.4	4.1	2.3
Baseline concom. NSAID/steroids/MTX/other DMARDS (%)	90.3/53.2/77.8/5.2	88.7/42.7/76.3/5	84.9/32.4/69.1/3.8	71/31/68.4/3.7	78.7/27.3/61/6.7	74.2/18.5/62.9/4.5
Active joints	10.3±9.8	9.0±9.4	7.8±9.0	6.2±8.0	4.9±6.5	4.6±5.5
Phy VAS (0–10)	6.8±2.4	5.8±2.6	5.2±2.6	4.9±2.9	5.0±2.6	4.8±2.5
Pat VAS (0–10)	5.7±2.7	5.4±2.7	4.8±2.6	3.7±2.7	3.7±2.6	3.7±2.3
CHAQ	1.0±0.8	0.8±0.7	0.7±0.6	0.6±0.6	0.5±0.6	0.5±0.5
CRP in mg/l	44.6±56.8	25.2±32.2	18.2±32.1	10.6±19.1	9.8±29.1	8.9±18.1
JADAS10	21.4±7.7	18.5±7.5	16.6±6.7	14.1±8.7	13.3±6.8	13.3±8.7

Changes in all parameters were significant ($p<0.001$) in Kruskal-Wallis-Test/Chi-quare.