AB0372

EXPLORING REFRACTORY DISEASE & PERSISTENT SYMPTOMS IN RA/POLYJIA DESPITE DMARDS: PATIENT & PROFESSIONAL EXPERIENCES

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Background: Refractory disease is defined as not achieving a low disease activity target despite DMARDs. This definition does not account for patients with well controlled inflammation who experience persistent symptoms, or who have a high perceived disease impact. Furthermore, variations in professionals understanding of refractory disease and related concepts exists, with potential discordance when compared to patients understanding.

Objectives: To qualitatively explore patients and professionals understanding and experiences of refractory disease and persistent symptoms.

Methods: Semi-structured interviews were conducted with 13 RA and 3 Polyarticular JIA patients (on bDMARD not responding with DAS28>3.2) attending four UK Rheumatology clinics. Thirty-two healthcare professionals (working in Rheumatology >1year) were interviewed across 11 UK hospitals. Inductive thematic analysis was conducted, with descriptive statistics reported for quantitative data.

Results: Patients had not responded to on average 3 csDMARDs and 3.5 bDMARDs, with mean MSK-HQ=24.6, mean DAS28=4.60, and mean Patient Global=55.4. Healthcare professionals interviewed were predominantly adult trained (25/32), with mean 11.7 years' experience, comprising rheumatologists, nurses, physiotherapists, occupational therapists, psychologists, pharmacist, podiatrist, and social worker.

Key themes for both patients and professionals' experiences of refractory disease and persistent symptoms explored were: 1) Frustrations with the disease, non-response to medication and side effects, 2) Importance of areas not captured by the DAS28, 3) Patient-centred targets/care, 4) Role of other specialties, 5) Role of comorbidities, infections and/or joint damage, and 6) Patient acceptance, adjustment and resilience. Although patients expressed hopeful expectations despite poor experiences, this was in discordance to professionals' accounts of loss of trust/hope, disengagement and limited treatment options, with hope mainly for stratified medicines.

Patient specific emergent themes identified: 1) Disease not controlled fully but manageable, 2) Drugs do not work: at all versus over time, 3) Persistent pain, fatigue and restricted mobility are most problematic symptoms, 4) Life-limiting impact: practically, psychologically/emotionally and socially, and 5) Good support from rheumatology team but holistic approach needed.

Professionals grouped refractory disease into four key areas: 1) Refractory Inflammation vs Refractory Symptomology, 2) Biological processes, 3) Drug inefficacy/tolerability, and 4) Patient health beliefs/behaviours.

Those with JIA had a greater variety in their experiences compared to those with RA. In addition to above themes they all highlighted the challenges of having a long-term illness so young, e.g. not knowing a life without pain or disease and lack of understanding in both themselves and others. Paediatric/Adolescent professionals noted differences in treating JIA compared to RA, e.g. joints affected and treatment guidelines/availability not based on DAS equivalent scores.

Conclusion: These results highlight the potential need for a broader definition for refractory disease, and the need for holistic approaches to treatment that better support both patients, and professionals, in managing their condition.

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AB0373

A COMPARATIVE EFFECTIVENESS STUDY OF ABATACEPT AND TNFI AGENTS IN PATIENTS WITH RHEUMATOID ARTHRITIS USING REAL-WORLD DATA

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Background: Introduction of multiple biologic DMARDs, targeted synthetic DMARDs and biosimilars has led to a paradigm shift in the management of patients (pts) with RA. There are, however, limited head-to-head studies comparing these agents to guide evidence-based treatment decisions. Abatacept versus adalimumab comparison in biologic-naïve RA subjects with background MTX (AMPLE) was the first head-to-head randomised controlled trial to evaluate the efficacy of abatacept (ABA) and adalimumab. However, there are limited data replicating AMPLE findings in real-world settings.

Objectives: To compare effectiveness of ABA versus TNF inhibitors (TNFis) in pts with RA by line of therapy (LOT) and by LOT stratified by anti-citrullinated protein antibody (ACPA) status using data from real-world clinical practice.

Methods: Data from two independent RA registries comprising pts treated by physicians in routine care were used for the analysis. An RA disease-specific registry provided data on pts treated with TNFis; the other was a product-specific RA registry and provided data on pts treated with ABA.^{1,2} The disease-specific registry was a US-based single-centre registry; the product-specific registry was a multi-centre, 12-country registry excluding the US. Frequency matching on age (in years [yrs]; ± 4 yrs' window), RA disease duration (in yrs; ± 4 yrs) and baseline CDAI category (remission [≤ 2.8], low activity [≤ 10], medium activity [≤ 22], high activity [>22]) between TNFi and ABA pts was done for biologic-naïve and -experienced pts. Descriptive statistics were used to summarise baseline demographics, disease activity measures and serostatus for both treatment groups by LOT. Disease activity in the follow-up period was measured at the 12-month mark (± 6 months). Change in disease activity after 12 months was evaluated for TNFi and ABA pts by LOT, and statistical comparison using Kruskal-Wallis test was performed. The analysis was repeated for pts stratified by ACPA status.

Table 1.

Table 1. Baseline characteristics by LOT and ACPA status

	ACPA+				ACPA-			
	First-line		Subsequent-line		First-line		Subsequent-line	
	ABA (n=68)	TNFis (n=68)	ABA (n=60)	TNFis (n=60)	ABA (n=31)	TNFis (n=31)	ABA (n=21)	TNFis (n=21)
Age, years	54.9 (12.9)	57.0 (13.3)	55.7 (10.3)	58.2 (10.4)	54.3 (8.5)	56.4 (9.5)	52.0 (12.4)	54.8 (12.3)
RA duration, years	9.9 (9.3)	11.0 (9.4)	17.0 (10.7)	17.6 (10.1)	4.1 (4.6)	4.4 (4.2)	9.2 (9.6)	10.3 (8.9)
Female, n (%)	52 (76.5)	55 (80.9)	45 (75.0)	54 (90.0)*	21 (67.7)	26 (83.9)	18 (85.7)	19 (90.5)
CDAI score	24.6 (10.9)	26.9 (14.8)	25.9 (14.9)	25.7 (15.3)	25.6 (10.8)	30.6 (15.8)	28.5 (17.1)	26.8 (15.7)

Mean (SD) reported, unless otherwise stated

*p<0.05 for ABA vs TNFi

ABA=abatacept; ACPA=anti-citrullinated protein antibody; LOT=line of therapy; TNFi=TNF inhibitor

Table 2.

Table 2. Change in disease activity (CDAI) by LOT and by LOT and ACPA status

		Baseline CDAI score	Follow-up CDAI score	CDAI reduction from baseline, %	Absolute CDAI reduction from baseline
Biologic naïve	TNFis (n=105)	28.4 (16.1)	13.3 (13.8)	53.3	15.1 (15.7)
	ABA (n=105)	24.2 (10.1)	9.5 (6.6)	61.0	14.8 (10.8)
Biologic experienced	TNFis (n=91)	24.6 (15.9)	19.4 (16.9)	21.2	5.2 (15.5)
	ABA (n=91)	23.8 (14.5)	13.6 (10.1)*	43.0	10.2 (13.4)*
ACPA+ biologic naïve	TNFis (n=68)	26.9 (14.8)	12.6 (11.8)	53.2	14.3 (15.7)
	ABA (n=68)	24.6 (10.9)	8.2 (6.0)	66.6	16.4 (10.8)
ACPA+ biologic experienced	TNFis (n=60)	25.7 (15.3)	19.6 (16.6)	24.0	6.2 (13.7)
	ABA (n=60)	25.9 (14.9)	12.6 (8.5)*	51.2	13.3 (14.3)*

Mean (SD) reported, unless otherwise specified

*p<0.05 for ABA vs TNFi

ACPA=anti-citrullinated protein antibody; LOT=line of therapy; TNFi=TNF inhibitor

Results: Data for 105 first-line and 91 second- or further-line (subsequent-line) matched pairs of TNFi and ABA pts were included in the analysis (68 first-line and 60 subsequent-line matched pairs of TNFi and ABA pts, respectively, in ACPA+ cohort; 31 first-line and 21 subsequent-