

BACKGROUND AND OBJECTIVES

Friedreich’s ataxia (FA) is a rare, progressive neurogenetic disease with numerous impairments: progressive loss of walking and writing, severe fatigue, pain due to spasticity, speech troubles, visual and hearing loss, cardiomyopathy, scoliosis, pes cavus, diabetes, etc. There is no cognitive impairment, hence the many social, psychological and emotional impacts. Omaveloxolone (Skyclarys®) received FDA approval as the first treatment for Friedreich ataxia in adults and adolescents aged 16 and older, in February 2023. In France, the Early Access to Skyclarys (before EU approval) was granted by the French National Health Authority by December 2023. Since then, French patients have been able to benefit from this treatment. In order to support the application to the French Health Authorities for a potential reimbursement of the costs of Skyclarys to patients, the French Friedreich Ataxia Patients Association (AFAF) collected patients’ first experiences following treatment prescriptions. Moreover, the experiences of the same patients were also collected a second time during 2024. Here we present their testimonies about their physical and psychological perceptions after receiving Omaveloxolone.

METHODS

- 1) The AFAF launched an invitation to its ~500 FA patients member base, to collect testimonials from those who have received Omaveloxolone (Oma) treatment for at least 4 weeks.
- 2) An interview guide was prepared with:
 - Questions designed to gather historical information: age at onset and at diagnosis, symptoms, information on their daily life, current medication, etc, before the treatment with Oma.
 - Open-ended questions organized by themes: positive and negative physical and psychological impressions, hopes and expectations.

Semi-structured non-invasive interviews were carried out by 3 AFAF administrators: patients were allowed to freely express their pre- and post-treatment perceptions.

- 4) The interviews were recorded and then transcribed.

- 5) Interviews were analyzed and summarized according to the themes defined in the interview guide. Results were categorized into different domains perceived by the patients as having an impact on their daily life, and presented as verbatims. These included fatigability, strength, balance and up-right stability, coordination, speech and other information. Frequencies were calculated as the total of patients giving an answer for each domain.

RESULTS

1) Characteristics of FA respondents

Nine patients, aged from 23 to 65 years, living with FA for 6 to 27 years responded promptly to our request for testimonials. The first interviews took place between April and May 2024, and the second ones with the same patients between September and October 2024. Only testimonies obtained from the 1st interview were used to support the application to the French Health Authorities for a potential reimbursement to patients of the costs of Skyclarys. Results obtained from the 2nd interview are included into the AFAF dossier to support the renewal of the Early Access procedure, addressed to the French Health Authorities.

Interview	Gender	Age (years)	Age at onset (years)	Age at diagnosis (years)	Duration of Oma treatment (weeks)	
					1 st interview	2 nd interview
1	F	23	13	20	11	35
2	M	24	7	10	9	35
3	F	30	15	20	4	27
4	F	31	9	9	10	33
5	M	32	16	17	7	31
6	F	35	9	13	7	29
7	F	43	16	17	11	36
8	F	51	45	46	6	30
9	F	65	54	54	8	29
Mean (SD)		37 (13.7)	20 (16.9)	23 (16.0)	8 (2.4)	32 (3.2)
Median		32	15	17	8	31
Range		23-65	7-54	9-54	4-11	27-36

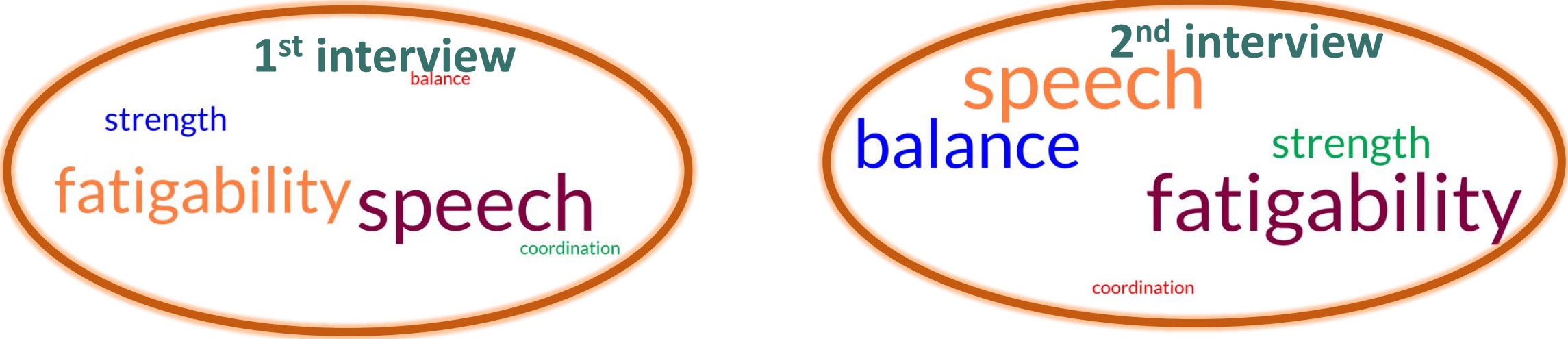
M: male/ F: female

2) Main perceived domains with impact on daily life: verbatims

BEFORE SKYCLARYS	FATIGABILITY		STRENGTH		BALANCE/ UPRIGHT STABILITY		COORDINATION		SPEECH		OTHER	
	1 st interview at	2 nd interview at	1 st interview at	2 nd interview at	1 st interview at	2 nd interview at	1 st interview at	2 nd interview at	1 st interview at	2 nd interview at	1 st interview at	2 nd interview at
Interview 1 (F/age 23) Autonomous, walking, balance problems, fatigability. Physiotherapy once/week. Yoga. Idebenone.	11 weeks	35 weeks	11 weeks	35 weeks	11 weeks	35 weeks	11 weeks	35 weeks	11 weeks	35 weeks	11 weeks	35 weeks
	"No improvement so far"					"My physiotherapist tells me that there has been improvement in my balance"			"No improvement so far"	"It's through the eyes of others that I see changes, for example my speech is better"		"Not many stunning effects, and no progression of the disease either"
Interview 2 (M/age 24) In wheelchair. Lives alone, transfers alone. Fatigue, loss of balance, pes cavus, handwriting problems, dyspraxia. Goes to the gym twice a week.	9 weeks	35 weeks	9 weeks	35 weeks	9 weeks	35 weeks	9 weeks	35 weeks	9 weeks	35 weeks	9 weeks	35 weeks
	"When I wake up, I get out of bed and I'm more mobile, everything is much easier, I wake up and I want to move"	"I'm less tired so it's easier to do things better, more efficiently. I also fall less" "When you do a lot of transfers, it requires a lot of energy, but with the medication, it's better"							"I feel like I can speak better, in fact I have more energy, it's as if I have more air"	"I find the greatest effect is in the voice. People around me have told me, even the doctor said, I really do have the impression that you speak better"		"Since I started taking the medication, the disease hasn't moved" "I feel really good. In fact I think the fact that I feel less tired plays a huge part in my mental state"
Interview 3 (F/age 30) In wheelchair. Not been able to stand up for 2 years. Physiotherapy 2 times/week, sports 2 times/week. Idebenone and oral contraception.	4 weeks	27 weeks	4 weeks	27 weeks	4 weeks	27 weeks	4 weeks	27 weeks	4 weeks	27 weeks	4 weeks	27 weeks
											"Pain in the abdomen and menstruation twice in a month"	"Since taking Skyclarys, I've had a lot of bleeding, several times a month, and abdominal pain. I've been very tired, so I quit taking it"
Interview 4 (F/age 31) Difficulty standing up in the wheelchair stander, pes cavus, needs human assistance, cannot sit up in bed, severe nystagmus, no longer able to read. No physiotherapy.	10 weeks	33 weeks	10 weeks	33 weeks	10 weeks	33 weeks	10 weeks	33 weeks	10 weeks	33 weeks	10 weeks	33 weeks
		"No change in fatigability"			"I don't need to grab onto my bed or mattress to sit up"	"I'm still sitting without holding on".	"I drop things a little less"	"I was able to play a video game again that I'd stopped, because there were just too many things I couldn't do, well, now I was able to do a bit more"	"People tell me I speak better than before, when I speak, people ask me less to repeat myself"	"I talk more, I don't restrain myself from talking"		"I don't know if it's due to Skyclarys, but I was able to move my feet without help. I could do it just a few years ago, I was sure I couldn't do it anymore but I did it"
Interview 5 (M/age 32) Autonomous, in a wheelchair. Fatigue (physical and psychological impact). Idebenone.	7 weeks	31 weeks	7 weeks	31 weeks	7 weeks	31 weeks	7 weeks	31 weeks	7 weeks	31 weeks	7 weeks	31 weeks
				"I stand up in front of the parallel bars at the physiotherapist's, without holding myself up. I found myself more comfortable than usual"					"People around me notice little things about my speech"	"A friend I haven't seen in a year told me I was much better understood"		
Interview 6 (F/age 35) Autonomous, manual wheelchair. Fatigue. Bladder problems: Ceris (Trospium chloride). Physiotherapy and gym.	7 weeks	29 weeks	7 weeks	29 weeks	7 weeks	29 weeks	7 weeks	29 weeks	7 weeks	29 weeks	7 weeks	29 weeks
	"Much less tired after 1 month of treatment"	"Regarding the fatigue, it's not about feeling better, it's about going back to the way you were before, it's like better than before" "I'm no longer tired, I can talk for half an hour in front of people"		"One thing I stopped doing, and I'm starting to do it again, is to bend over in my wheelchair, and get up without my hands or anything, just with my back muscles"		"When it comes to sports, I try harder when I stand up straight, it's possible, so I do it! My physiotherapist is happy because I can do exercises better, for example, with my back"						"I have much less nystagmus"
Interview 7 (F/age 43) Self-education at home, walks with walker, yoga 2 times/day, writing, swimming, adapted pilates, dance, rowing. Physiotherapy, energy therapy.Toviaz and dietary supplements.	11 weeks	36 weeks	11 weeks	36 weeks	11 weeks	36 weeks	11 weeks	36 weeks	11 weeks	36 weeks	11 weeks	36 weeks
	"Three weeks later after the treatment, I really felt less tired"	"I still feel much less tired, really, and much more energized"	"When I drop something on the ground, I pick it up, but I feel like I get up faster, yes, that's it"			"My physiotherapist sees that I'm more upright"			"And when I'm not tired, I feel like I speak more, it's more fluid"	"I've been told several times that I speak much faster, more fluid"	"I've been taking Toviaz only in the evening for the past three weeks" "I feel like I'm doing things a little faster, which is really encouraging, and for the mood, it's great"	"I quit taking Toviaz" "Before skyclarys, I was coughing really badly, now I'd say I just have a light cough, so it's pretty good"
Interview 8 (F/age 51) Upper limb problems. Walks with 2 canes. Does a lot of physical therapy.	6 weeks	30 weeks	6 weeks	30 weeks	6 weeks	30 weeks	6 weeks	30 weeks	6 weeks	30 weeks	6 weeks	30 weeks
	"The first thing I felt, and really quickly within 15 days, was less fatigue"	"When walking with my walker I notice that I'm less short of breath" "I saw the neurologist again, I did the tests much faster!".		"I can bend over and straighten up my back" "I can do exercises if they have little amplitude, I have more energy". "I do more sports"	"I have one knee more stable. I can hop from one foot to the other, and yesterday I tried to run in my garden, I succeeded a little!"	"When balance persists on long walks, I speed up my walk and my balance improves. I need less concentration to keep my balance" "I stand more upright"			"I make longer sentences because I'm less tired"	"I can answer the phone at work without any problem, I feel better about this"		"Many very positive aspects, it changes everything in my life, I begin to do more things"
Interview 9 (F/age 65) Uncontrolled gestures, beta-blockers when intense tremors. Physical therapy 2 times/week.	8 weeks	29 weeks	8 weeks	29 weeks	8 weeks	29 weeks	8 weeks	29 weeks	8 weeks	29 weeks	8 weeks	29 weeks
		"Now I'm a little more tired."						"Nothing improved"				"I no longer have any problems of urinary incontinence"

3) Frequencies of the main identified domains with impact on daily life

- During both interviews, at ~8 weeks and ~32 weeks of treatment with Oma, patients mainly described an improvement in speech and a better intelligibility.
- A significant reduction of fatigue and better balance or upright stability, were reported by more patients during the 2nd interview. These effects positively impacted their daily activities and motivation.
- A better coordination with less clumsiness and more strength were also reported.
- One patient indicated no improvement, but more fatigue.



Frequencies of the main identified domains were reflected as a word cloud for visualization. Bigger words represent a higher instance of reporting and smaller words represent a lower instance of reporting.

CONCLUSIONS

This approach, representing the “Voice of Patients”, may complement the scientific analyses currently being performed by French neurologists, based on the data collected by the French National Registry of Rare Diseases as part of the Early Access program.

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