LONG-TERM TREATMENT IN CHRONIC INFLAMMATORY DEMYELINATING POLYNEUROPATHY (CIDP)

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Background: Corticosteroids (CS), plasmaexchange (PE) and intravenous Immunogobulins (IVIg) are effective treatments in CIDP. Individual response is variable and efficacy of combined treatments poorly studied.

Objectives: To evaluate long-term outcome in CIDP patients under treatment and to look for predictors of response.

Patients and Methods: Retrospective, monocenter, non randomized, non blinded observational study. CIDP diagnosed according to the Inflammatory Neuropathy Cause and Treatment (INCAT) group. Patients with concomitant systemic disease such as diabetes, malignancy, monoclonal gammopathy or anti-myelin associated glycoprotein antibody were excluded.

Patients: Twenty-nine patients,16 men, fullfilling inclusion criteria were evaluated.

Results: Average follow-up of patients was 7.9 years. Age at onset of symptoms was 47.6 years. Disease duration before treatment was 27.9 months. 70% had predominant sensory symptom onset and 54% had predominant motor symptoms in the longterm. One third changed from sensory to motor, but none changed from motor to sensory in the course of the disease. Onset was subacute in 17%, all motor. 69% experienced a chronic and 31% a relapsing-remitting course.

Initial treatment modality was: CS in 14, effective in 9 (64%); PE in 7, effective in 3 (43%); IVIg in 6, effective in 5 (83%); combined CS and PE or IVIG in 3. Combined treatments in the longterm were necessary in 25 patients: CS combined with others in 18, effective in 13 (72 %); IVIG combined with others in 14, effective in 10 (71%); CS and IVIg in 8, effective in all (100%); PE with various others in 10, effective in 5 (50 %); Azathioprin with various others in 6, effective in 5 (83%)

Complete remission was achieved in 11/29 (38%) at end of follow-up (3 patients with CS, 2 with IVIg, 6 with combined treatments). Table 2 shows absence of any correlation between disease features and complete remission. MRS was 2.17 (mean; range 1 – 5) before initiation of treatment and 1.03 (mean; range 0 – 4) at end of follow-up (p = 0.0001) demonstrating overall efficacy of treatment modalities.

Table 1 - Treatment initiation

mRS before treatment	Number of patients (n =)	Initial treatment							
		Corticosteroids		IVIg		PE		Combined therapies	
1	9	5	56%	2	22%	2	22%	0	0%
2	11	8	73%	2	18%	1	9%	0	0%
3	5	1	20%	1	20%	3	60%	0	0%
4	3	0	0%	1	33%	1	33%	1	33%
5	1	0	0%	0	0%	0	0%	1	100%

Combined therapies were PE/corticosteroids and IVIg/corticosteroids

Table 2: Correlation of clinical features with outcome

Variable	Complete remission at end of follow-up	p Value
Age		
< 40 years (n = 9)	3 (33%)	0.6187
> 40 years (n = 20)	8 (40%)	
Sex		
Female (n = 13)	6 (46%)	0.3668
Male (n = 16)	5 (31%)	
mRS before treatment		
1 - 2 (n = 20)	7 (35%)	0.8843
3 - 5 (n = 9)	4 (44%)	
Mode of onset		
Subacute (n = 5)	2 (40%)	0.9524
Slow (n = 24)	9 (38%)	
Disease duration before treatment		
< 1 year (n = 17)	7 (41%)	0.2075
>= 1 year (n = 12)	4 (33%)	
Onset of symptoms		
Sensory (n = 21)	9 (43%	0.2825
Motor (n = 8)	2 (25%)	
Course of disease		
Predominantly sensory (n = 14)	6 (43%)	0.9524
Predominantly motor (n = 15)	5 (33%)	
CSF protein level		
Normal (n = 9)	4 (44%)	0.7159
Elevated (n = 19)	7 (37%)	

Discussion

We found response rates of 72% to CS and 71% to IVIg. These rates are in accordance with the literature [1, 2]. However, efficacy to a treatment modality was lost in 20-30% of our patients.

In 86 % a combined treatment was necessary in the long-term of which IVIg & CS proved most effective. This combination has been systematically studied in GBS but not in CIDP. In GBS a randomized controlled trial compared 0.4 g/kg/d IVIg plus 500 mg/d methylprednisolon for 5 days against IVIg and placebo for 5 days. The results were in favor of the combination [2].

AZA is frequently used in CIDP, usually to reduce CS dosage. But a parallel group open study of AZA combined with prednisone didn't show a positive result [5]. With 5/6 responders and none of them losing efficacy, our experience with this treatment, however, is good. Larger trials are needed to assess the efficacy of AZA as second line therapy in CIDP.

Long term prognosis for CIDP is favourable. Some patients experience complete remission even without requiring immunosuppressive treatment [6]. In this study, 38% of patients were without symptoms at the end of follow up. Without any significant clinical outcome predictors, females and patients with a sensory onset of symptoms did better.

Short disease duration before initiation of treatment may reduce ongoing demyelination and avoid axonal loss. Absence of axonal loss and early treatment were found to be associated with better outcome [7]. In our sample we found a trend that more patients with short pretreatment disease duration where cured at end of follow up. This underlines the need for early diagnosis and initiation of treatment. Due to clinical variability and relatively low incidence of CIDP, admission of patients to a neurological unit is often delayed; in our sample, disease duration before treatment was more than two years with a range up to 11 years. This underlines the need for further education of general practitioners.

As a non randomized, non blinded observational study with a broad spectrum of treatment modalities used, this study has limitations. Our findings confirm the favourable prognosis and the availability of efficacious treatments in CIDP and support the use of combined treatment modalities if necessary.

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