CIDP: Treatment

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EFNS/PNS CIDP Guidelines Treatment Recommendations

- IVIG (Recommendation Level A), or
- Corticosteroids (Recommendation Level C) should be considered in sensory and motor CIDP
- If IVIG and corticosteroids are ineffective, plasma exchange (PE) should be considered (Recommendation Level A)

Plasma Exchange in CIDP

- Double blind study of 18 CIDP patients (9 patients with progressive neuropathy and 9 with relapsing course)
- Over 4 weeks, patients received 10 sham treatments or plasmapheresis, with a wash-out period and a cross-over
- 15 patients completed the trial: **12/15 improved with PE**
- **8/12** relapsed within 1-2 weeks of stopping it
- All patients subsequently improved with open-label PE

Open-label Trial of Prednisone

- 60 treated patients
- Had greater than 90% response rate to prednisone
- Mean time to any improvement of about 2 months
- Mean time to maximum improvement about 6 months

Chronic Inflammatory Demyelinating Polyradiculoneuropathy
Clinical Characteristics, Course, and Recommendations for Diagnostic Criteria

Corticosteroids

- First therapy for patients with CIDP
  - Though not strictly Level 1 evidence, the vast clinical experience is important in the classification of evidence in this case
- Many studies exist showing the efficacy of steroids for inducing clinical improvement in various scenarios including nonrandomized, retrospective, noncontrolled studies
- Consensus of experts is that glucocorticoid therapy produces a significant improvement
- Delivery is deemed effective using either oral or intravenous delivery protocols

ICE Trial Methods

- International multicenter randomized, double-blind, placebo-controlled crossover trial in 117 patients
- Longest trial to date showing the short- and long-term efficacy of IVIG in patients with CIDP
- Patients met specific neurophysiological inflammatory neuropathy cause and treatment (INCAT) criteria for CIDP
- Treated with IVIG vs placebo every 3 weeks for up to 24 weeks in an initial treatment period

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ICE Trial Methods

• The primary outcome was the percentage of patients who maintained an improvement from baseline in adjusted INCAT disability score of 1 point or more through week 24
• The secondary outcomes include grip strength, MRC score, QOL measures, and time to relapse

In CIDP, the most common adverse reactions with GAMUNEX-C were headache, pyrexia, hypertension, chills, rash, nausea, arthralgia, and asthenia. The most serious adverse reaction was pulmonary embolism (PE) in 1 subject with a history of PE.

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Adverse Reactions in CIDP

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IVIG Dosing and Treatment Duration for CIDP

- Loading dose 2 g/kg over 2-4 days
- Maintenance 1 g/kg every 3 weeks over 1-2 days
  - This was dose used in ICE trial
- Allow 3 cycles to assess for response
  - ICE trial suggested patients respond by 6 weeks
- Follow with objective parameters

It is recommended that the initial infusion rate be used for the first 30 minutes. If well tolerated, the rate may be gradually increased to a maximum of 0.08 mL/kg per minute (8 mg/kg/min). Certain severe adverse drug reactions may be related to the rate of infusion. Slowing or stopping the infusion usually allows the symptoms to disappear promptly. Ensure that patients with preexisting renal insufficiency are not volume depleted; discontinue if renal function deteriorates. For patients at risk of renal dysfunction or thromboembolic events, administer at the minimum infusion rate practicable.

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How Long Does it Take to See Response to IVIG?

- Among IVIG Responders
  - 14/32 improved by week 3
  - 16/32 improved by week 6
  - 1/32 improved by week 12
  - 1/32 improved by week 18

Suggests that the majority of patients who respond to IVIG do so by 6 weeks.

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ICE Study: Primary Outcome

- 54% of treated patients showed improved INCAT scores vs 21% of placebo patients ($P=0.002$)

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Time for Maximal Improvement With IVIG

- Among the responder group
  - 4/32 patients reached maximal improvement by week 3
  - 18/32 patients (> 50%) reached maximal improvement by week 6
  - All 32 (100%) reached maximal improvement by week 24

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Probability of Relapse After Tapering Therapy

Withdrawal of therapy, re-randomization to placebo increased the risk of CIDP relapse.

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ICE Study Summary

• During the treatment phase:
  – 59 patients were randomized to IVIG; 58 placebo
  – Dosing: 2 g/kg load followed by 1 g/kg every 3 weeks
  – IVIG arm: 36 improved; 23 showed progression
  – Placebo arm: 12 improved; 45 relapsed
• Primary outcome: 54% of treated patients showed improved INCAT scores vs 21% of placebo patients (p=0.002)
• During the 24-week extension phase, 57 patients were re-randomized. Patients who received IVIG for the 48 weeks had a significantly lower relapse rate
• IVIG is effective for the treatment of CIDP. The maintenance dose of 1 g/kg every 3 weeks is effective in preventing relapse vs placebo

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