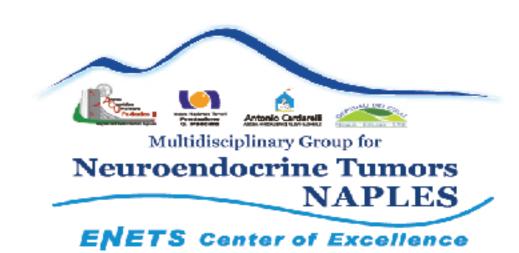
HIGH-DOSE TREATMENT WITH SOMATOSTATIN ANALOGS



IN NEUROENDOCRINE TUMORS



R. Modica¹, V. Ramundo¹, F. Marciello¹, V. Marotta¹, G. Pizza¹, P. Buonomano¹,

A.C. Carratù¹, C. de Luca di Roseto¹, C. Giordano², F. Trimarchi³, A. Colao¹, A. Faggiano¹

¹Department of Clinical Medicine and Surgery, Endocrinology, "Federico II" University of Naples, Italy; ²Department of Internal and Specialistic Medicine, Endocrinology, University of Palermo, Italy; ³Department of Clinic and Sperimental Medicine, Endocrinology, University of Messina, Italy.

INTRODUCTION & OBJECTIVE

Somatostatin analogs (SSA) have been demonstrated to increase time to progression in patients affected with well-differentiated NETs. In progressive or metastatic NETs, increasing SSA dose or shortening the dosing interval are common clinical practice, though empirical. Aim of this study is to evaluate efficacy and safety of high-dose SSA treatment in patients with progressive disease under standard SSA dose.

PATIENTS & METHODS

Twenty-one patients (median age 56.8 yrs) with G1-G2 well differentiated NET of different origin were retrospectively identified among 118 patients under SSA therapy (18%). All 21 patients were treated with SSA high-dose schedule treatment, after disease progression under standard dose. The median follow-up with high dose SSA was 22.3 months (range 4-76). High-dose schedule included octreotide LAR in 15 patients (73%) and lanreotide Autogel in 6 (27%).

RESULTS

Partial objective tumor response was recorded in 1 patient (5%), stabilization in 10 (47.5%) and progression in 10 (47.5%). Progression free survival (PFS) was significantly higher with high-dose treatment compared with standard dose (32 vs 8 months, p<0.05) (Fig.1). Among 16 patients who were symptomatic under standard dose, complete clinical response was obtained in 1 (6%), partial response in 9 (57%). Side effects were abdominal discomfort (5%), asymptomatic gallstones (5%) and type 2 diabetes mellitus (5%).

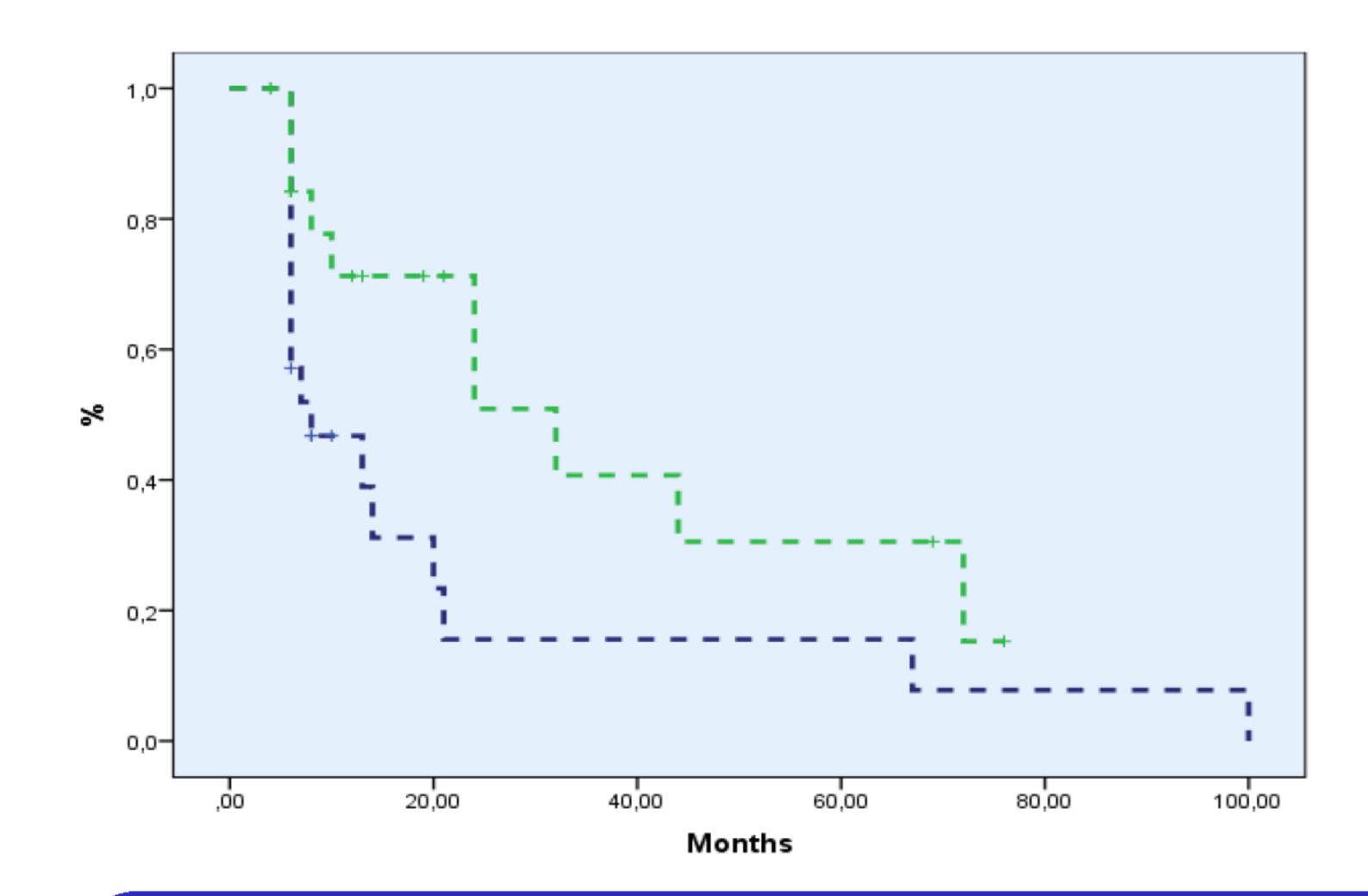


Figure 1: PFS in 21 NET patients treated with high-dose SSA treatment (green line) compared with standard SSA dose (blue line) (32 vs 8 months, p<0.05).

CONCLUSIONS

High-dose SSA treatment in progressive NET is still effective in patients refractory to standard dose. No additional toxicity is observed with high-dose SSA treatment compared with standard dose.

References

- 1) Faggiano A, Ferolla P, Grimaldi F, Campana D, Manzoni M, Davì MV, Bianchi A, Valcavi R, Papini E, Giuffrida D, Ferone D, Fanciulli G, Arnaldi G, Franchi GM, Francia G, Fasola G, Crinò L, Pontecorvi A, Tomassetti P, Colao A. Natural history of gastro-entero-pancreatic and thoracic neuroendocrine tumors. Data from a large prospective and retrospective Italian epidemiological study: the NET management study. J Endocrinol Invest. 2012 Oct;35(9):817-23.
- 2) Rinke A, Müller HH, Schade-Brittinger C, Klose KJ, Barth P, Wied M, Mayer C, Aminossadati B, Pape UF, Bläker M, Harder J, Arnold C, Gress T, Arnold R; PROMID Study Group. Placebo-controlled, double-blind, prospective, randomized study on the effect of octreotide LAR in the control of tumor growth in patients with metastatic neuroendocrine midgut tumors: a report from the PROMID Study Group. J Clin Oncol. 2009 Oct 1;27(28):4656-63.
- 3) Ferolla P, Faggiano A, Grimaldi F, Ferone D, Scarpelli G, Ramundo V, Severino R, Bellucci MC, Camera LM, Lombardi G, Angeletti G, Colao A. Shortened interval of long-acting octreotide administration is effective in patients with well-differentiated neuroendocrine carcinomas in progression on standard doses. J Endocrinol Invest. 2012 Mar;35(3):326-31.





