

### Does dietetic input improve symptomatic outcome of chronic diarrhoea due to pancreatic exocrine dysfunction?

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#### Background

Chronic diarrhoea is a significant cause of morbidity in patients with HIV. Pancreatic exocrine dysfunction is a known cause and pancreatic enzyme replacement therapy (PERT) is the mainstay of treatment. The efficacy of dietary manipulation alongside PERT is unknown. We therefore investigated symptom improvement of individuals prescribed PERT alone or those who received dietetic input alongside PERT.

#### Objectives

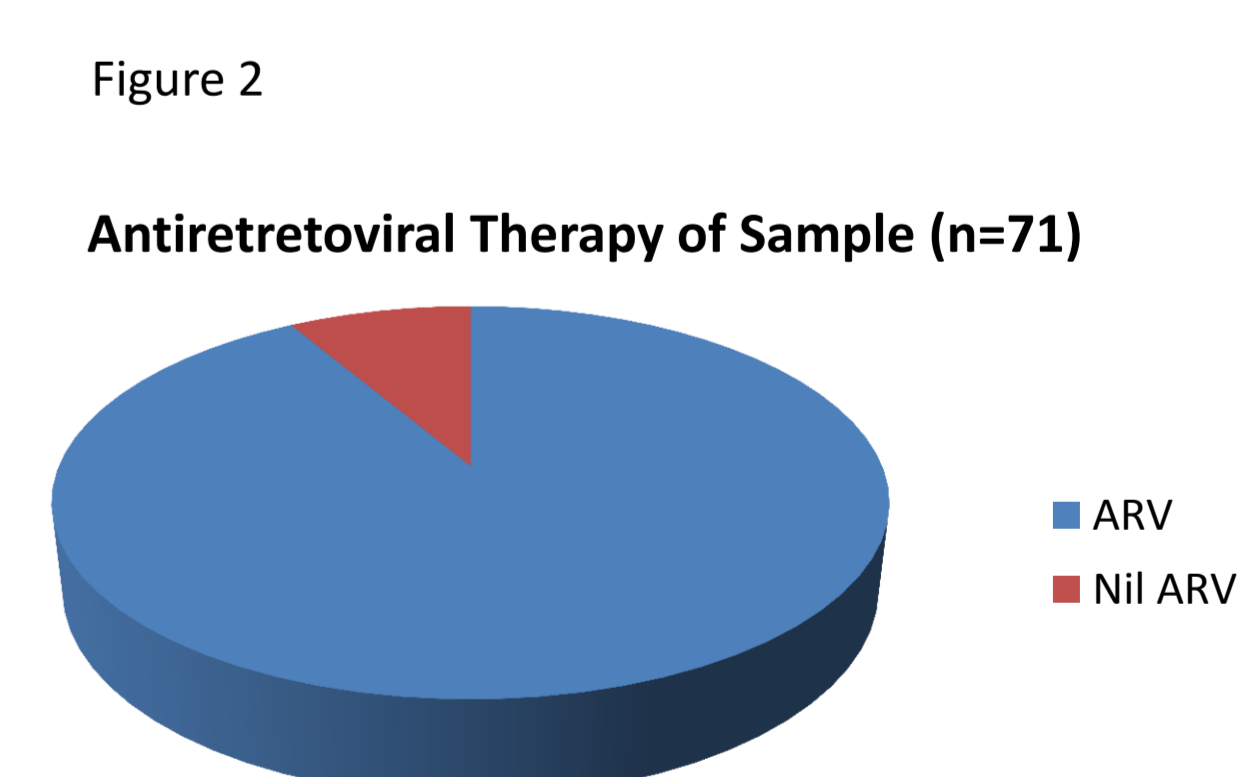
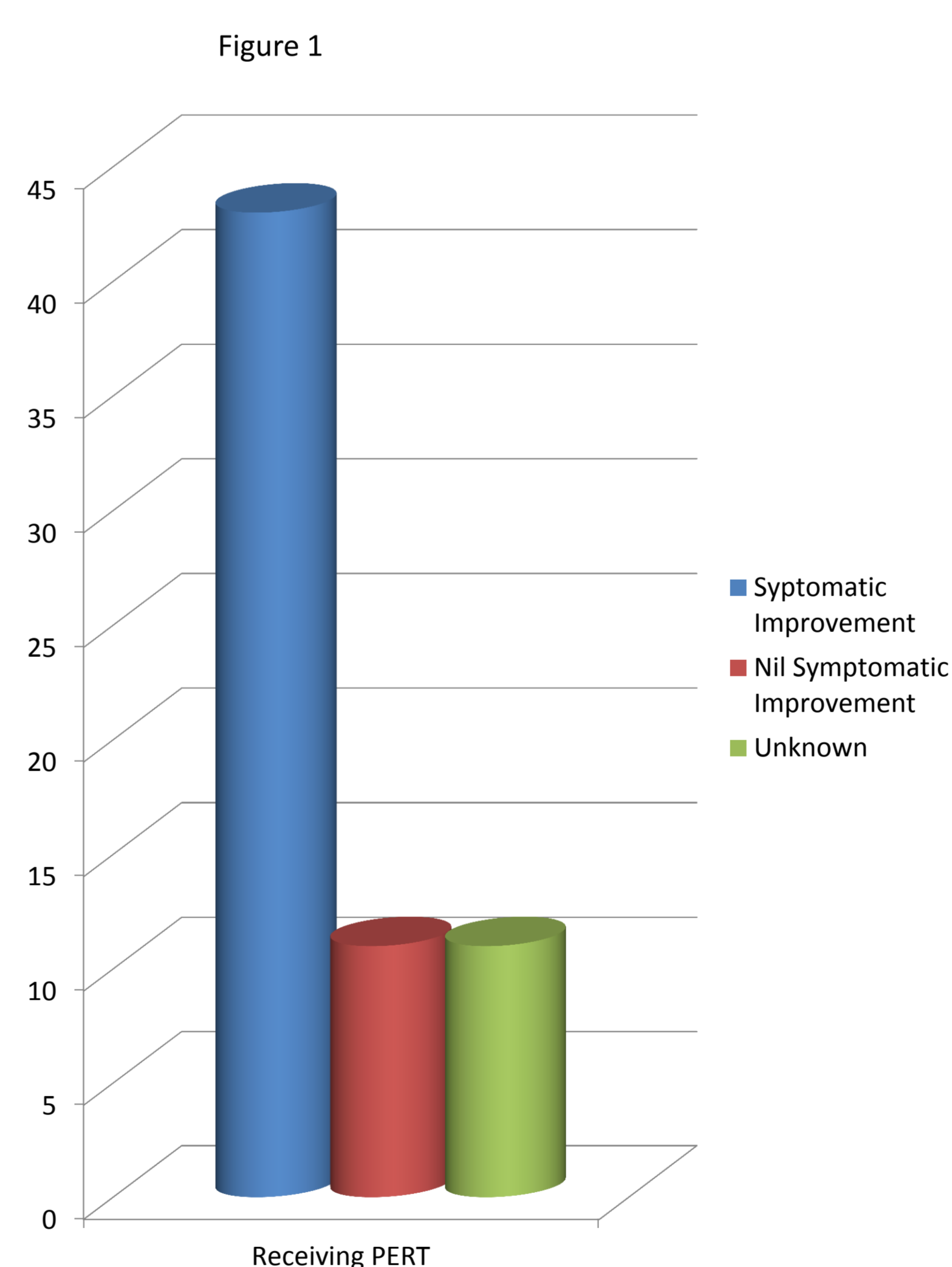
To audit symptomatic improvement in individuals prescribed PERT alone compared to those who received dietetic input alongside PERT

#### Method

All HIV positive patients who were prescribed PERT over a 2 year period were assessed. A list of patients was generated by the pharmacy department. Electronic and paper case notes of all these patients were reviewed looking for symptoms of pancreatic insufficiency and the process of the prescription of Creon. Primary outcome data included dietetic input, faecal elastase or total faecal fat measurement, PERT dose, and symptomatic changes after therapy.

#### Results

Of the 71 patients prescribed PERT, 43 (60.5%) had evidence of symptomatic improvement, 11(15.5%) had no improvement and 17 (24.0%) unknown (figure 1). Of the 43 with symptom improvement, 33 (77%) had seen a Dietitian and 10 (23%) had not. Of the 11 with no symptom improvement, 6 (54.5%) saw the dietitian and 5 (45.5%) did not. Of the 71 patients, 65 (91.5%) were receiving ART at the point of PERT prescription, 81% had a regime containing an NRTI (Nucleoside Reverse Transcriptase Inhibitors) of the 81% just over half (51%) had a PI (Protease Inhibitor) and NRTI in the regime with only 12.5% containing a PI and NNRTI (Non-Nucleoside Reverse Transcriptase Inhibitors) (figure 2)



#### Conclusions

Faecal elastase sampling should form part of the routine work-up for HIV positive patients with chronic diarrhoea. It is also important to consider the ART combination to highlight any perceived risk of pancreatic exocrine dysfunction. The findings indicate a positive trend on symptomatic outcome with dietetic input. If PERT is commenced the patient should be assessed by a specialist dietitian at baseline to record full gastroenterological symptoms, recommend dietary changes and PERT dosing.

#### References:

- Call, S.A, Heudebert, G, Saag, M, Wilcox, C,M (2000) *The Changing etiology of chronic diarrhoea in HIV infected patients with CD4 cell counts less than 200 cells/mm<sup>3</sup>*. American Journal of medicine. Vol 95:3142-3146
- Nusrat ,S, Rana, S, Bhasin, D, Pandhi, P, Srivastava P, Sehmy, S, Kumar, R, Malhotra, S (2010)Cochrane systematic review, Pancreatic enzymes for chronic pancreatitis
- Price, D.A, Schmid, M.L, Ong, E.L.C, Adjukeiwicz, K.M.B, Peaston, B, Snow, M.H (2005) *Pancreatic exocrine insufficiency in HIV-positive patients*. British HIV Association, HIV Medicine, Vol 6, 33 -36

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