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Comparison Of Body Fat Content And Distribution Of Familial Amyloidotic Polyneuropathy Patients Versus Healthy Subjects: 2607: Board #1 May 29 2:00 PM - 3:30 PM

[F-22 Free Communication/Poster - Clinical Exercise Physiology: MAY 29, 2009 1:00 PM - 6:00 PM ROOM: Hall 4F]

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The deposition of amyloid fibers at the peripheral nervous system can induce motor neuropathy in Familial Amyloidotic Polyneuropathy (FAP) patients. This produces progressive reductions in functional capacity. The only treatment for FAP is a liver transplant, followed by aggressive medication that can affect patients' metabolism. To our knowledge, there are no data on body fat distribution or comparison between healthy and FAP subjects, which may be important for clinical assessment and management of this disease.

PURPOSE: To analyze body fat content and distribution between FAP patients and healthy subjects.

METHODS: Body fat content and distribution were measured through Double Energy X-ray Densitometry (DXA) in two groups. Group 1 consisted of 43 Familial Amyloidotic Polyneuropathy patients (19 males, 32 + 8 Yrs, and 24 females, 37 + 5 yrs), who had liver transplant less than 2 months before. Group 2 consisted of 18 healthy subjects of similar age (8 males, 36 + 7 yrs, and 10 females, 39 + 5 yrs).


RESULTS: Healthy subjects showed higher values than FAP patients for: BMI (24,2+2,3kg/m² vs 22,3+3,8 kg/m² respectively, p<0,05), % trunk BF (26,21+8,34kg vs 20,78+9,05kg respectively, p<0,05), % visceral BF (24,43+7,97% vs 19,21+9,30% respectively, p<0,05), % abdominal BF (26,63+8,51% vs 20,63+10,35% respectively, p<0,05) abdominal subcutaneous BF (0,533+0,421kg vs 0,353+0,257kg respectively, p=0,05), abdominal BF/BF ratio (0,09+0,02 vs 0,08+0,02 respectively, p<0,05) and abdominal BF/trunk BF ratio (0,19+0,03 vs 0,17+0,03 respectively, p<0,05).

CONCLUSIONS: These results showed that FAP patients soon after liver transplantation exhibited a healthier body fat profile compared to controls. However, fat content and distribution varied widely in FAP subjects, suggesting an individualized approach for assessment and intervention rather than general guidelines. Future research is needed to investigate the long term consequences on body fat following liver transplant in this population.

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