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## Metabolic syndrome and pulmonary arterial hypertension: the relationship between gut and lung

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Pulmonary arterial hypertension (PAH) is an unknown complication of metabolic syndrome (MS) and more than half of patients with idiopathic-PAH have criteria for MS. There are several mechanisms for the development of PAH in obese and diabetic patients such as inflammation, angiogenesis, hypoxia, sleep apnea, insulin resistance, cardiac disorders, etc. There is an important relationship between glycemic control and PAH; patients with HbA1c > 5.7% presented a lower risk to survival and worst pulmonary capacity. When we search about "weight loss and PAH" in PubMed we find few studies about this (only cases reports and after bariatric surgery). Bariatric surgery promotes weight loss but also increases GLP1 (glucagon like-peptide 1) levels and GLP1 has an unknown pleiotropic effect in the lung, it promotes pulmonary artery vasorelaxation. Our group showed that, using a DDP4 inhibitor (vildagliptin 50 mg 2x/day-drug which increases native GLP1 without weight loss) in diabetic patients with obesity and (idiopathic and symptomatic) PAH promotes important improvement of PAH and decrease of systolic pressure of right ventricle in echocardiogram. Maybe increasing GLP1 is better than weight loss in patients with MS and PAH.

### Biography

Flavio Fontes Pirozzi is an Endocrinologist of Brazilian Society of Endocrinology and Metabolism. He has done his Master's degree in Genetics from the Sao Paulo University and is a Professor of Endocrinology department of Unilago Medical School, Brazil.

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