Insulin resistance (IR) takes a crucial role in metabolism. Also, the presence of microRNAs was involved in metabolic control. Remarkably, circulating miR-143 and miR-145 have shown controversial results regarding women-metabolism in the aging process. Our study aimed to evaluate the association of metabolic profile with the relative expression of circulating miR-143 and miR-145 in the insulin resistance pathological adiposity in the elderly women group.

**MATERIALS & METHODS**

We included 73 women, classified as young and senior (aged 20–39 and 40–59 years), by body fat % as lean and overweight (lean < 35% and overweight ≥ 35%), and insulin or non-insulin resistant by HOMA-IR. We evaluated body fat storage using bioelectrical impedance. Biochemical markers by routine methods. Insulin and adiponectin-oligomers serum levels by the ELISA method. Relative expression measures of miR-143 and miR-145 circulating levels (normalized with endogenous miR-320a) with the TaqMan Advanced miRNA Assays system and 2-ΔCT method, were assessed in association with clinical outputs.

**RESULTS**

The expression profiles of circulating miR-143/miR-145 suggest a response to chronic metabolic dysregulation to exert roles in metabolism, on the respective non-IR and IR clinical scenarios, where adiponectin dysregulation is shown in the pathological corporal redistribution of fat mass and dyslipidemic phenotype in aging.

**CONCLUSION**

The expression profiles of circulating miR-143/miR-145 suggest a response to chronic metabolic dysregulation to exert roles in metabolism, on the respective non-IR and IR clinical scenarios, where adiponectin dysregulation is shown in the pathological corporal redistribution of fat mass and dyslipidemic phenotype in aging.

**References:**