Results: Waist/height ratio (W/h) is greater in M general sample ($P = 0{\cdot}01$) but also in POST-F:PRE-F ($P = 0{\cdot}05$) and in PRE-M:PRE-F ($P = 0{\cdot}0001$). At large, blood glucose was higher in M, independently from puberty ($P = 0{\cdot}01$), while insulin was similar in F/M. After sub-grouping, insulin was higher in post-F/M (both $P = 0{\cdot}0001$) *v.* PRE, while glucose was higher in POST-F:POST-M ($P = 0{\cdot}01$).

Similar behaviour for insulin resistance-homeostasis model assessment (IR-HOMA): higher in POST-F/M *v.* PRE (both $P = 0{\cdot}0001$). Besides, IR-HOMA >2·5 risk is higher in POST (whole sample, F, M), but POST-M have a greater risk (OR = 2·11 POST:PRE, $P = 0{\cdot}0001$; OR = 2·45 POST-M:PRE-M, $P = 0{\cdot}02$; OR = 1·94 POST-F:PRE-F, $P = 0{\cdot}01$).

Conclusions: M attending our outpatients service seems in poorer nutritional (higher W/h) and metabolic conditions (higher pathologic IR-HOMA risk) than F, with a slight indication that abdominal fat distribution might not be the only explanation for IR appearance: other factors should be considered and studied.

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29 – Insulin resistance risk among ex-preterm overweight/obese patients

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Introduction: According to the 'thrifty phenotype' hypothesis, ex-preterm (ExP) children, if overfed in infancy, show a greater insulin resistance (IR) risk than AGA (appropriate gestational age) children. ExP also shows a larger waist circumference (W), due to greater extent of abdominal fat: this might trigger off IR.

Method: 655 valid overweight/obese patients (F 356, M 309; average age = 10·43 (SD 2·84) years) were considered: ExP 118 (F 62, M 56), AGA 547 (F 294, M 253). Anthropometric indexes studied were W and waist/height ratio (W/h). Insulin resistance-homeostasis model assessment (IR-HOMA), studied in 569 patients (ExP 102: F 54, M 48; AGA 467: F 254, M 213), led to sub-grouping them in: IR-HOMA >2·5 (ExP 53: F 26, M 27; AGA 226: F 129, M 97) and IR-HOMA <2·5 (ExP 49: F 28, M 21; AGA 241: F 125, M 116). Statistical analysis used Student's t and χ^2 tests.

Results: W was >95thC in 97·4% of ExP *v.* 91·4% of AGA; W/h was pathologic (>0·5) in 92·4% of ExP *v.* 89·0% of AGA. ExP have a higher risk of W > 95thC and W/h > 0·5 than AGA (W OR: F = 5·33, M = 2·23; W/h OR = 1·5 in both F/M, respectively). ExP also have IR-HOMA > 2·5 more frequently, with higher risk for M (OR: F = 0·9; M = 1·5).

Conclusions: In our experience, ExP of both genders show a greater extent of W > 95°C and W/h > 0·5 than AGA, but an IR risk just slightly higher (OR = 1·25). M ExP seems to be at higher risk than F: literature lacks of data about this point.

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30 – Relationship among insulin resistance, blood lipids and blood pressure in a population of paediatric overweight/obese patients

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Introduction: Within the ample debate about Metabolic Syndrome, its *primum movens* and its pathophysiology, a relationship among high insulin resistance-homeostasis model assessment (IR-HOMA), blood lipids (BL: triglycerides