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Poster presentation

Statistical agreement between ATPIII, IDF, EGIR, AACE metabolic syndrome classifications in HIV-infected patients and association with lipodystrophy

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Purpose of the study
To assess statistical agreement of metabolic syndrome (MS) ATPIII, IDF, EGIR and AACE classification in HIV-infected patients and association with body fat redistribution.

Methods
Cross-sectional observational study that included all consecutive HIV-infected patients seen at a metabolic clinic who were screened for MS and had a clinical and radiological lipodystrophy (LD) evaluation. Cohen's Kappa statistic was calculated to assess statistical agreement between different MS classifications. Logistic regression models were performed to identify factors associated with different MS classifications. (Tables 1 and 2.)

Summary of results
1,348 pts were included in the analysis.

Figure 1 depicts prevalence of metabolic syndrome according to different definition.

Conclusion
Concordance between MS classification is less than ideal. After adjusting for BMI strata, lipodystrophy phenotypes and central fat accumulation are associated with for MS diagnosis.

Table 1: K of Cohen shows a low level of agreement between MS classifications.

	EGIR	AACE	NCEP ATP-III
IDF	0.27* (64.61%)	0.07* (56.01%)	0.41* (71.66%)
EGIR		0.21* (74.33%)	0.38* (75.74%)
AACE			0.35* (81.68%)

*p-value < 0.001 Body fat changes (LD definition and objective anthropometric variables) were included in univariable and multivariable logistic analysis.

Table 2:

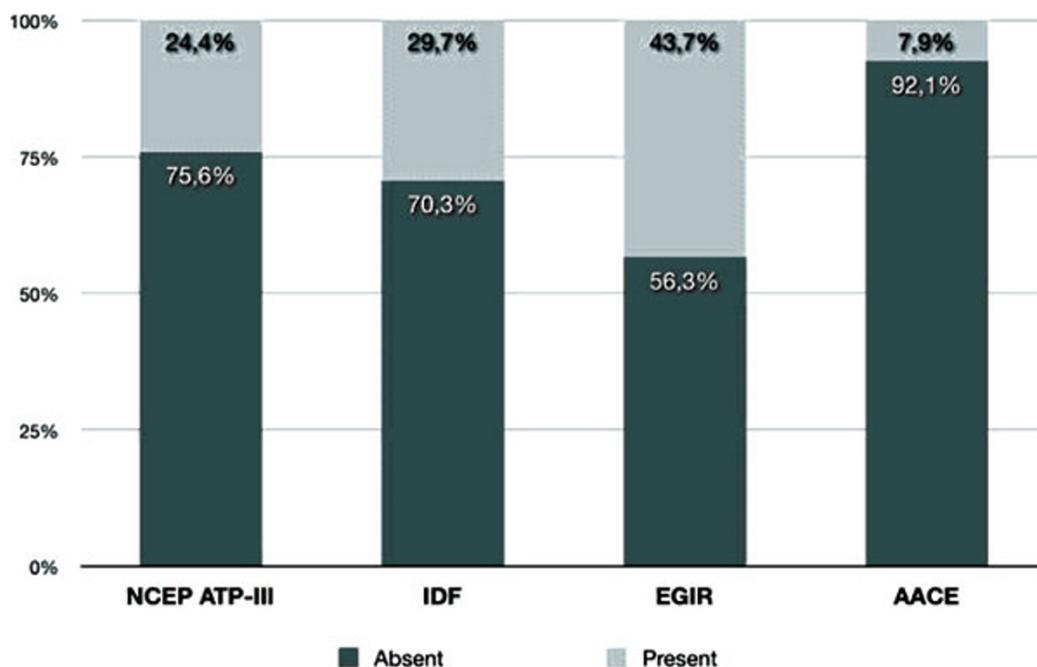| Variables	ATP-III Adj. OR (95% CI)	P-value	EGIR Adj. OR (95% CI)	P-value	IDF Adj. OR (95% CI)	P-value
Lipoatrophy	1.14 (0.66; 1.96)	0.63	1.20 (0.71; 2.03)	0.49	1.21 (0.79; 1.84)	0.37
Central adiposity	1.87 (0.99; 3.53)	0.054	2.88 (1.64; 4.27)	0.001	2.14 (1.21; 3.79)	0.009
Mixed form	2.06 (1.26; 3.37)	0.004	2.65 (1.64; 4.27)	<0.0001	2.12 (1.43; 3.14)	<0.0001
% fat legs (10%)	1.04 (0.82; 1.32)	0.73	0.73 (0.57; 0.93)	0.013	0.91 (0.74; 1.13)	0.41
VAT/TAT	12.35 (4.84; 31.48)	<0.0001	2.80 (1.16; 6.78)	0.022	2.37 (1.08; 5.21)	0.031
BMI						
<19	0.33 (0.13; 0.86)	0.024	0.30 (0.12; 0.78)	0.014	0.51 (0.28; 0.92)	0.027
between 19 and 25	Ref.	-	Ref.	-	Ref.	-
between 25 and 30	2.12 (1.51; 2.99)	<0.0001	2.36 (1.70; 3.28)	<0.0001	2.42 (1.76; 3.32)	<0.0001
>30	5.56 (3.04; 10.16)	<0.0001	12.38 (6.28; 24.43)	<0.0001	5.99 (3.02; 11.90)	<0.0001

Figure 1