HIV SUBTYPES: WHERE ARE WE NOW?

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BACKGROUND

Published guidelines recommend HIV genotype resistance testing for all patients. Our aim was to characterize from an epidemiological point of view the different HIV subtypes present in our outpatient clinic.

METHODS

Retrospective analyses of 821 patients admitted to our clinic until 2021, with available HIV subtype was made: age at diagnosis, year of diagnosis, country of origin, race, sex and form of transmission were obtained. Patients with vertical transmission were excluded.

RESULTS

The main subtypes found were: B (38.8%); G (19.8%), CRF_02AG (15,8%) and C (10.7%). Until 2010 the main subtypes were B 41.5% and G 27.5%. After 2010 the main subtypes were B 35.9% and CRF_02 AG 21% (G representing 11.9%). Comparative study of the main different subtypes showed epidemiological differences:

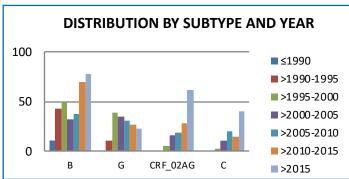
-Subtype B (n=319): 79.3% of patients were male, 75% of Portuguese origin, 52% were MSM and 34.4% had heterosexual sex as form of transmission, mean age at diagnosis was 33.6 years and 54% were diagnosed after year 2010.

-Subtype G (n=163): 49.6% of patients were male, 70.5% of Portuguese origin, 73.6% had heterosexual sex as form of transmission, mean age at diagnosis was 36.8 years and 30% were diagnosed infected after year 2010.

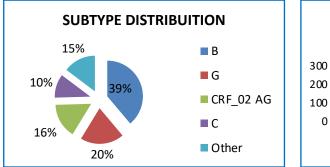
-Subtype CRF_02AG (n=130): 57.6% of patients were female, 26.9% of Portuguese origin, 70.7% of subsaharian Africa origin, 82.3% had heterosexual sex as form of transmission, mean age at diagnosis was 37.3 years and 69% were diagnosed after year 2010.

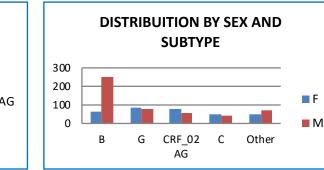
-Subtype C (n=88): 55.6% of patients were female, 28.4% of Portuguese origin, 68.1% of subsaharian Africa origin, 80.6% had heterosexual sex as form of transmission, mean age at diagnosis was 35.6 years and 61% were diagnosed after year 2010.

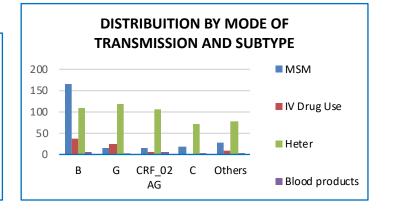
SUBTYPE	B (n=319)	G (n=163)	CRF_02 AG (n=130)	C (n=88)
Male sex	79.3% (n=253)	49.6% (n=81)	42.4% (n=55)	44.6% (n=39)
Portuguese origin	85% (n=271)	70.5% (n=115)	26.9% (n=35)	28.4% (n=25)
MT* heterossexual	34.4% (n=110)	73.6% (n=120)	82.3% (n=107)	80.6% (n=71)
Mean age at diagnosis	34 years	37 years	37 years	36 years
Diagnosis >year 2010	54% (n=172)	30% (n=49)	69% (n=90)	61% (n=54)











CONCLUSIONS

The analysis of this data shows a bimodal distribution of the epidemic in Portugal: an initial epidemic with B strains, as in Western Europe, and a second, latter one, with non-B subtypes, disseminated through patients from African and South American origin. The presence on non-B strains, with intrinsic patterns of resistance and underrepresented in clinical trials puts a burden on the management of these patients.