O23 - Comunicación Oral/Oral communication

VIH y tuberculosis

HIV and tuberculosis

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Moderador/Chairperson:
Ildefonso Hernández Aguado

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IMPACT OF HAART AND AGE ON PROGRESSION TO AIDS AND DEATH IN HAEMOPHILICS IN SPAIN

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Introduction: HAART has had profound effects in halting HIV progression in Spain but its impact among haemophilics has not been evaluated. This impact is inevitably confounded by the survival bias introduced by patients who receive treatment and age. The aim of this studye is to describe progression to AIDS an Death over 20 years in HIV positive haemophilics and the impact of HAARt in different age groups.
Methods: All haemophilics with a diagnosis of HIV infection followed up in three Haemophilia Hospital Units (La Paz in Madrid, Vall d'Hebrón in Barcelone and Virgen del Rocío in Seville) were included in this retrospective cohort within GEMES Project. After imputing date of seroconversion, cumulative risk of AIDS and death was calculated by extended Kaplan-Meier estimates allowing for late entry. Follow up swas divided by calendar periods: before 1988, 1988-89, 1990-1991, 1992-1993, 1994-1995, 1996-1997, 1998-2001, censoring patients at the end of 2001 The incidence ratio of first AIDS event and death from all causes were calculated for each of this periods,. Poisson regression was used to model the incidence rate adjusting for potential confounders as age at seroconversion, type of clotting disorder, severity, ART treatment.
Results: 609 patients were identified, 44% were under 15 years old. The majority had type A hameophilia (85%). 371 (61%) people developed AIDS being Pneumocystis Carinii Pneumonia the commonest cause The percentage of AIDS-free subjects after 15 years of HIV infection was higher for those under 15 years (45%) and higher for those over 35% (5%). A reduction of AIDS incidence rate was observed for all age groups after 1996,year of introduction of HAART. No statistically significant interaction was detected between age and calendar period in time to AIDS analyses. 357 (60%) persons died. Marked differences were observed in survival according to age at seroconversion; none of those aged over 35 years old at seroconversion was alive after 20 years since HIV infection compared to 53% of those under 15 years of age. Mortality rate increased overtime for all age groups decreasing very marked after 1996. No statistically significant interaction interaction was detected between age and calendar for time to death analyses.
Conclusions: AIDS and death incidence rates are larger than those described for IDUs and Homosexual in Spain though important reductions in HIV disease progression to AIDS and death are also observed from 1998 to 2001 in haemophilics in Spain and can be partly attributed to Highly Active Antiretroviral therapy. Age at and time since seroconversion are powerful predictors of HIV disease progression, together with the type of haemophilia.
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PROGRESSION OF HIV INFECTION AND MORTALITY BY HEPATITIS C INFECTION IN PATIENTS WITH HEMOPHILIA OVER 20 YEARS

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Objective: Hepatitis C Virus (HCV) infection is an important cause of mortality in HIV-positive hemophiliacs. We describe progression to AIDS, death from HCV end-stage liver disease (ESLD) and from all cause mortality over 20 years.
Method: All HIV- positive hemophiliacs in La Paz University Hospital were included in this cohort study. After imputing date of seroconversion, rates of AIDS, death from ESLD and from all cause mortality was calculated by Poisson Regression using competing risks models. Follow up was divided by calendar periods: before 1988, 1988-89, 1990-1991, 1992-1993, 1994-1995, 1996-1997, 1998-2001, censoring patients at the end of 2001.
Results: Among 383 cohort members, global AIDS incidence was 9.7 per 100 person-years, peaking in 1992-93 and dropping by 87% in 1998-2001 compared to before 1988 (IRR 0.13 95%CI: 0.03-0.53). Overall mortality was 7.5 per 100 person-years, was highest from 1992 to 1997, and fell by 66% in 1998-2001 compared to before 1988 (IRR 0.34 95%CI: 0.14-0.81. Eighteen (5%) persons died of ESLD which represented 19% of deaths before 1988, 4% from 1988-89, 1990-91 and 1992-93, 2% in 1994-95, 10% in 1996-97 and 33% in 1998-2001. Overall death rate from ESLD was 0.5 cases per 100 person-years with no statistically significant trend observed overtime.
Conclusions: Important reductions in HIV disease progression to AIDS and death have been observed from 1998 to 2001 and can be attributed to Highly Active Antiretroviral therapy. Although no increase in the rate of HCV related deaths can be demonstrated, HCV accounts for an increasing proportion of deaths in the last years.

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EFFECTIVENESS OF HAART IN THE RISK OF SPECIFIC FIRST AIDS-DEFINING CONDITION IN SPANISH HIV SEROCONVERTERS COHORTS

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Objective: Several studies have shown a reduction of AIDS incidence after the introduction of highly active antiretroviral therapy (HAART). The objective of this study was to analyse the effectiveness of HAART in the risk of specific first AIDS defining condition (ADC) among the Spanish HIV seroconverters cohorts from GEMES Study.
Methods: Data from 1203 individuals, with well-documented HIV seroconversion dates belonging to 5 cohorts recruited from 1980s up to 2000 within GEMES project, were analysed. Time from seroconversion to first ADC or pre-AIDS death was analyse under a competing risk framework. Only ADC with more than ten cases (8 groups) were considered. Risk of AIDS and death were compared in different calendar periods: before 1994, from 1994 to 1996, (reference) and 1996 onwards adjusting for sex, age and exposure category stratifying by cohort. Staggered entry Kaplan-Meier and Cox regression, fitting calendar period as a time-dependent covariate, were used. To cope with competing risks three censoring strategies were used. First specific ADC hazard was estimated censoring other ADC at the time of occurrence. Second, competing risk hazard was estimated censoring other ADC at the end of follow up. Lastly, subjects developing other ADC were dropped out as they are not at risk of developing the specific ADC as their first one.
Results: 269 (22.3%) AIDS cases and 62 pre-AIDS death were observed. Tuberculosis(TB), both pulmonary and extrapulmonary were the most frequent ADC (37%) followed by PCP (13%), and oesophageal Candidiasis (9%). Most ADC groups showed a risk reduction for last calendar period (1996 onwards) except for oesophageal candidiasis (RR 1.45 95%CI 0.24-8.85). A great heterogenetiy among the reduction of risk was observed going from a relative risk (RR) of 0.16 (95% CI 0.05-0.46) for PCP, a RR of 0.56 (95% CI 0.34-0.93) for Tuberculosis up to a RR of 0.96 (95% CI 0.44-2.08) for the group "rest of ADC". For Pre-AIDS mortality no significant reduction was observed with a RR of 0.90 (95% IC 0.49-1.67. After fitting a multiple failure-time data excluding pre-AIDS mortality as an endpoint there was still significant effect of calendar period (RR 0.58 95%IC 0.43 - 0.78). Similar results were observed using all censoring strategies.
Conclusions: Risk reduction were observed in most ADC after the introduction of HAART therapies in 1996. No risk reduction was observed for pre-AIDS mortality. These reductions were fairly heterogeneous among the specific ADC and were similar using different strategies of censoring to take into account competing risk
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CO-MORBIDITY AND PREDICTORS OF M. TUBERCULOSIS INFECTION AMONG HIV-INFECTED SPANISH SUBJECTS NOT PREVIOUSLY FOLLOWED REGULARLY

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Objectives: To describe socio-demographic and clinical variables at study entry in a cohort of HIV(+) Spanish subjects not previously followed regularly; and to investigate factors related to infection with Mycobacterium tuberculosis (MTB).
Methods: HIV(+) patients not previously followed on a regular basis at a HIV-clinic were prospectively identified between March 2000-February 2003 in the HIV-clinics of 10 Spanish hospitals. Information on socio-demographic variables, risk factors for HIV, clinical variables, TB history, tuberculin skin testing (TST), anergy testing and use of TB preventive therapy were collected from the clinical records. The odds ratio and its 95% confidence interval (OR, 95%CI) was the measure of association. Logistic regression was used for the multivariate analysis.
Results: 1142 subjects met the entry criteria. They were mostly male (75.4%), Spanish (87.2%) with a mean (SD) age of 36 (8.4) years and highly unemployed (38.4%). Intravenous drug users (IDU) were the most common HIV risk group (54.3%), followed by heterosexuals (27.5%) and men who have sex with men (MSM) (15.2%). At the initial evaluation median (P5-P95) CD4 was 300 cel/mm3 (16-963), median viral load was 38000 copies (133-487000) and median GPT was 34 units (12-160); almost 7% of the patients were chronic HBs Ag carriers and 55.7% were infected with the hepatitis C virus. A total of 767 (67.2%) subjects were prescribed highly active anti-retroviral therapy (HAART) and 33% were taking some other medication. Anergy was evaluated in 25% of the patients and, contrary to Spanish guidelines, TST was not performed in 116 (10.2%), while 17 subjects either refused testing or never come back to have the test read. At study entry, at least 180 (15.8%) patients recalled a contact with a TB case, and 291 (25.5%) had evidence of infection with MTB: 97 (8.5%) were or have being TB patients and 194 (17%) had a positive TST without signs of disease. In the multivariate analysis evidence of MTB infection was associated with male sex (OR:1.5, 1.0-2.2); age-group 30-39 (OR:1.7, 1.1-2.5) or 40-49 years (OR:1.8, 1.1-3.0); unemployment (OR:1.5, 1.0-2.0); illiteracy (OR:1.9, 1.1-.3.2) or poor education (OR:1.7, 1.1-2.5); homelessness (OR:2.3, 1.3-4.1) or living with family (OR:1.7, 1.0-2.9) as compared to living alone; being IDU (OR:2.0, 1.1-3.5) or heterosexual (OR:1.7, 1.0-3.1) as compared to being MSM; being a contact of a TB case (OR:2, 1.4-2.9); and (negatively) with having CD4<100 (OR:0.6, 0.3-0.9).
Conclusion: HIV(+) Spanish subjects have a high degree of co-morbidity that makes more difficult to implement TB preventive therapy. Evidence of infection with MTB is positively related to male sex, increasing age, bad social indicators, HIV-infection through IDU or heterosexual sex, and contact with a TB case; and negatively with CD4<100. This later finding suggests that some degree of anergy might be present in this cohort.

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MODIFICATIONS TO INITIAL ANTI-TUBERCULOSIS TREATMENT IN A COHORT OF SPANISH TB CASES

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Objectives: To describe modifications to anti-tuberculosis (TB) treatment and factors associated with them in a cohort of new TB patients identified in six of Spain's Autonomous Regions (AR): Asturias, Catalonia, Galicia, La Rioja, Murcia and Basque Country.
Methods: In the course of a study aimed at investigating the outcome of anti-TB treatment, information on modifications to initial treatment was collected from the clinical records in a retrospective cohort of new TB cases identified in six Spanish AR from May 1996-April 1997. Cases were followed up until 3 months after the envisaged treatment-completion date. Modification was defined as: a) the inclusion and/or exclusion of one or more drugs different from those initially prescribed; b) a physician's prescribed change in treatment duration that implied at least a three months increase in the initial treatment duration. The odds ratio and its 95% confidence interval (OR, 95%CI) was the measure of association. Logistic regression was used for the multivariate analysis.
Results: A total of 4,899 new TB cases were diagnosed during the study period. Out of them, 67 died and in 317 instances the clinical record was lost; thus, the final study population included 4,515 cases. At least one modification to the treatment initially prescribed was recorded in 554 (12.3%) patients, the commonest cause being toxicity (49.1%) followed by unfavourable evolution. Changing some drug was the commonest modification introduced (67.9%). Variations on the proportion of modifications were observed by several variables. In the multivariate analysis modifications increased with male sex (OR: 1.3, 1.1-1.5) foreign nationality (OR: 1.9, 1.2-2.9), intravenous drug use (IDU) (OR: 1.4, 0.9-2.0), use of single-drug formulations (OR: 1.6, 1.2-2.1) and, linearly, with quartiles of age (OR: 1.5 for age group 26-36 years; OR: 2.0 for age group 37-57 years; OR:2.5 for age >57 years). Diabetes was the only variable associated in a negative way with modification (OR: 0.6, 0.4-1.0). An interaction was observed between HIV status and number of drugs used for initial anti-TB treatment: modifications are always more likely among HIV-infected than among HIV-uninfected patients; but while among the HIV-uninfected individuals modifications increase when 4, instead of 3, anti-TB drugs are prescribed for treatment, the opposite is true among the HIV-infected.
Conclusion: Modifications to anti-TB treatment are quite frequent among new TB cases in Spain. The most frequent reason for modification is toxicity and the commonest change is inclusion/exclusion of some drug. Factors associated with modifications are sex, age, nationality, IDU, use of single-drug formulations and (negatively) diabetes. HIV status is a modifier of the effect of number of anti-TB drugs initially prescribed on anti-TB treatment modification.

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CHARACTERISTICS OF THE DELAYED DIAGNOSIS OF HIV INFECTION IN CATALONIA

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Background: An early HIV diagnosis offers the benefits of HAART and OI´s prophylaxis, as well as access to receive social support and modify HIV transmission behaviors. A high proportion of people remain having a delayed access to the HIV test. In Catalonia 45% of the AIDS cases had a delayed diagnosis of 12 months between HIV and AIDS diagnosis (1997-2001). The objective of this study (FIPSE-12176p) is to identify factors associated to the delayed diagnosis of HIV infection in Catalonia.

Methods: The design of the study is transversal and the data collection was carried out through personal interviews and medical records review of HIV infected patients who receive health services in 7 hospitals in Catalonia. The study sample included patients living in Catalonia, older than 13 y/o at diagnosis and first HIV test during 1998-2002. Delayed HIV diagnosis was defined as patients with first CD4+ lymphocytes count <200 x 10^6 cel/l at the moment of HIV diagnosis. The independent variables were: socio-demographics, reasons for being HIV tested and reasons for not being tested before, access to health services, sexual behavior and clinical variables at the moment of HIV diagnosis. Data was collected using a validated questionnaire without personal identifiers. The statistical analysis was performed using the software SPPSS v11.

Results: Out of the 329 interviewed cases, 163 (49,1%) had a CD4+ count <200 x 10^6 cel/l at HIV diagnosis. Fifty-four percent (53,8%) of men and 43,9% women (p=0,006) showed a delayed diagnosis (DD). Considering the route of HIV transmission, delayed diagnosis was more frequent among persons infected through heterosexual relations (57,7%), and less among men who have sex with men (46,9%) and IVDU (34,7%) (p<0,05). The most common response to "the reasons for being HIV tested" was "physician's recommendation" (68,1%) and among cases with delayed HIV diagnosis was "being ill" (67,2%).

Conclusions: Preliminary data showed that half of the cases had their first HIV+ test when their immunology stage was already suppressed. HIV-positive cases with sexual relations as route of infection had a lower perception of risk to be HIV infected than IVDU. Most of the patients had their first HIV+ test because of being ill or because of physician's recommendation. Further analysis of the factors related to delayed diagnosis is needed in order to modify prevention and early HIV testing programs in the general population.