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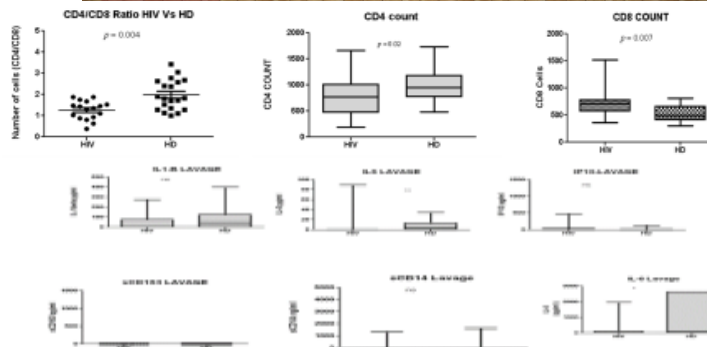
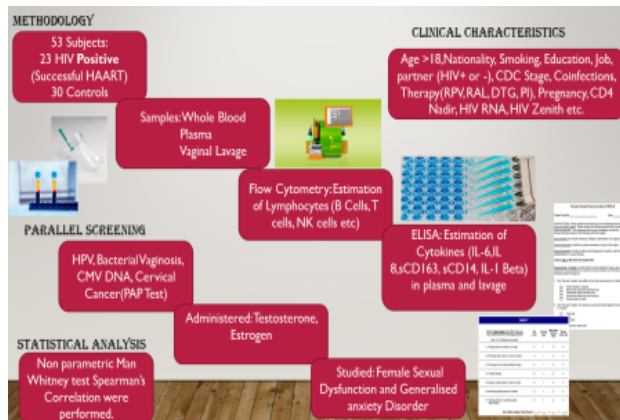
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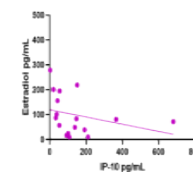
Background: HIV infection in women in disproportionate ratios as compared to men has been a grave concern over the years. It is in proportion to reproductive and hormonal differences making women more vulnerable. It elicits an Immune response which can be monitored by analysing various factors such as mucosal immunity, sexual behaviour, biomarkers in the plasma, serum and vaginal lavage and vaginal infections.

Results

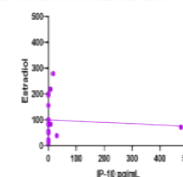
- The levels of Cytokines sCD14, sCD163, IL-8, IL-1BETA, IL-6 and IP-10 are higher in the plasma of HIV infected women as compared to Healthy women (HD)
- IL-6 and IL-8 were lower in the vaginal lavage of HIV infected women while others were not so significant.
- Z index was associated with orgasm domains ($p=0.01$; $r=-0.4$) and CD4+ T cells ($p=0.02$; $r=-0.45$).
- Estradiol and plasmatic IP-10 values were correlated ($r=0.8$, $p=0.02$).
- Both groups had similar anxiety disorders: 27% in HIV Women and 25 % in HW.
- Healthy women had higher CD4/CD8 ratio and CD4 Cell Count.
- Testosterone levels were correlated to age and plasmatic IL-6, IP-10 and sCD14 ($p=0.02$, $r=0.74$).



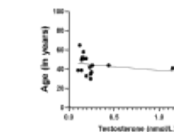
XY data: Correlation between Estradiol and IP-10 in Plasma



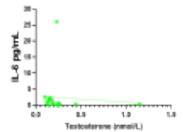
XY data: Correlation between Estradiol and IP-10 in Vaginal Lavage



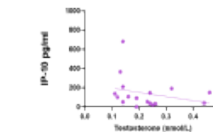
XY data: Correlation between testosterone and Age



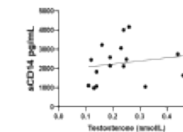
XY data: Correlation between testosterone and IL-6 in Plasma



XY data: Correlation between testosterone and IP-10 in Plasma



XY data: Correlation between testosterone and sCD14 in Plasma



Conclusion

- A dissociation between plasma and mucosal immune activation is observed.
- Female Sexual Dysfunction seems to be associated with HIV positivity and testosterone levels.
- The underlying gap between the quality of life of young healthy and HIV women needs to be bridged.