

Investigating the immuno-pathology of HIV arthropathy by synovial fluid analysis.

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Aims and Objectives

We aim to bring together collaborators from UCT and UCL to define the mechanisms of disease in childhood joint disease associated with HIV infection in South Africa.

Cross disciplinary

This proposal represents a unique opportunity for UCL investigators who have not previously collaborated to use their expertise to address a neglected clinical problem in an African setting by working with local clinicians who are directly involved in the clinical care of children with HIV associated joint disease.

The rheumatology unit in Cape Town, led by Dr. Chris Scott, cares for 150 children with various forms of arthritis, of whom at any one time 10 will be HIV +ve and an estimated 25-30% will have latent TB.

Activities

Dr Chris Scott and Clive Gray visited UCL ICH and Infection and Immunology Unit in Feb 2012 for 5 days.

Several research meetings were held with Dr Mahdad Noursadeghi, Prof Lucy Wedderburn and Dr Clare Jolly, discussing potential research ideas, refining questions and drafting protocol. Visits to Prof Wedderburn's laboratory were arranged to gain insight to methods of synovial fluid analysis.



Fig 1: Swollen ankle joint of a 2 year old child with HIV arthropathy, showing synovial biopsy scar.

Outputs and impacts

- Collaboration initiated
- Research question, methodology and protocol drafted
- Ethics approval for a pilot study has been granted
- Further funding applications submitted to the National Health Laboratory Services and the Poliomyelitis Research Foundation

Conclusion

- An international collaborative effort aimed at investigating the immunopathology of HIV and arthritis, an important and neglected area of research.
- This has provided the basis for a pilot study and further research grant applications.

