Health outcomes for young adults with perinatally acquired HIV-1 infection following transfer to adult services

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Background

Ageing perinatal cohort

• Globally
  • 2.1 million children <15 yrs

• UK Collaborative HIV Paediatric Study (CHIPS)
  March 2010:
  • 1,645 children
  • 65% age 10+
  • 262 transferred to adult care

Long-term outcomes are uncertain

Neurocognitive [Ashby, 2011]
Complex psychological needs
[Frize, 2011]

Bone: 83% vitamin D deficiency
Reduced bone mass density

Reproductive health outcomes
[Crouch, 2011]

Poor adherence to ART

Cardiovascular risks:
Lipid abnormalities
Increased carotid intimal thickness
Thrombophilia
Aim

To examine health outcomes of \( n = 58 \) young people with perinatally acquired HIV infection in adult care at a single UK centre.

Methods

Retrospective case note review of all paHIV young people seen in the 900 clinic between Jan 2006-2011

Measured Outcomes:

- Demographics
- ART history
- Current CD4 Count, viral load (pVL)
- Attendance and loss to follow up
- Inpatient admissions
- Mortality
- Lipodystrophy requiring intervention
- Mental health diagnoses, overdose, antidepressant use
Demographics n=58

Median age of transfer from Paediatrics = 17.2 (16.3 – 18.6) yrs
Current median age = 20.6 (range 16.9-26.1) yrs

Outcomes

5 transferred to local adult services (9%)
2 Deaths (4%)

1) 20y/F - multi-drug resistant end-stage HIV disease
2) 21y/F - HIV nephropathy and sepsis, declined ART
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There was no loss to follow up

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2) 21y/F - HIV nephropathy and sepsis, declined ART
Most Recent CD4 Count

Median = 425 (30-1140)

Antiretroviral Therapy

- ART naïve (10%), 5
- Stopped ART (24%), 12
- NNRTI based (27%), 14
- Boosted Protease inhibitors (35%), 18
- Triple nucleoside regimen (4%), 2

Patients (%)
Antiretroviral Therapy

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Response to Therapy n =34

- 85% undetectable
- Median CD4 = 480

Patients (%)

CD4 Count (cells/µl)

- n = 6
- n = 2
- n = 26
## Complications of Disease and Treatment

**Adherence** ([McDonald, 2011; Kent, 2011])
- 2 patients have gastrostomies to enhance adherence

**Treatment**
- 6/51 (12%) have severe lipodystrophy
  - 5 requiring surgery
  - 1 injectable fillers

**Mental Health** ([Frize, BHIVA, 2011])
- 4 patients - intentional overdoses requiring admission
- 7/51 (14%) have ever been prescribed antidepressants

## Hospital Admissions

- 13/51 (25%) have been admitted to adult inpatient services
- Median duration 9 (3-133) days

- 2 proven opportunistic infections (PCP, MAI)
- 4 were admitted following overdoses
- 1 CVA + osteonecrosis
Conclusions - Two decades of living with HIV

- One in 5 has severe immunosuppression (CD4 < 200)
- One in 4 required hospital admission
- 2/58 died
- High rates of co-morbidity; lipodystrophy and depression
- Despite attending for MDT follow up there is a small group of young people who remain off ART with low CD4 counts

- But not all bad news:
  85% of those who take ART are undetectable

Thank you

- To all the young people from the 900 clinic
- BHIVA
- CHIPS
- 900 Clinic multi-disciplinary team
- Jane Ashby