

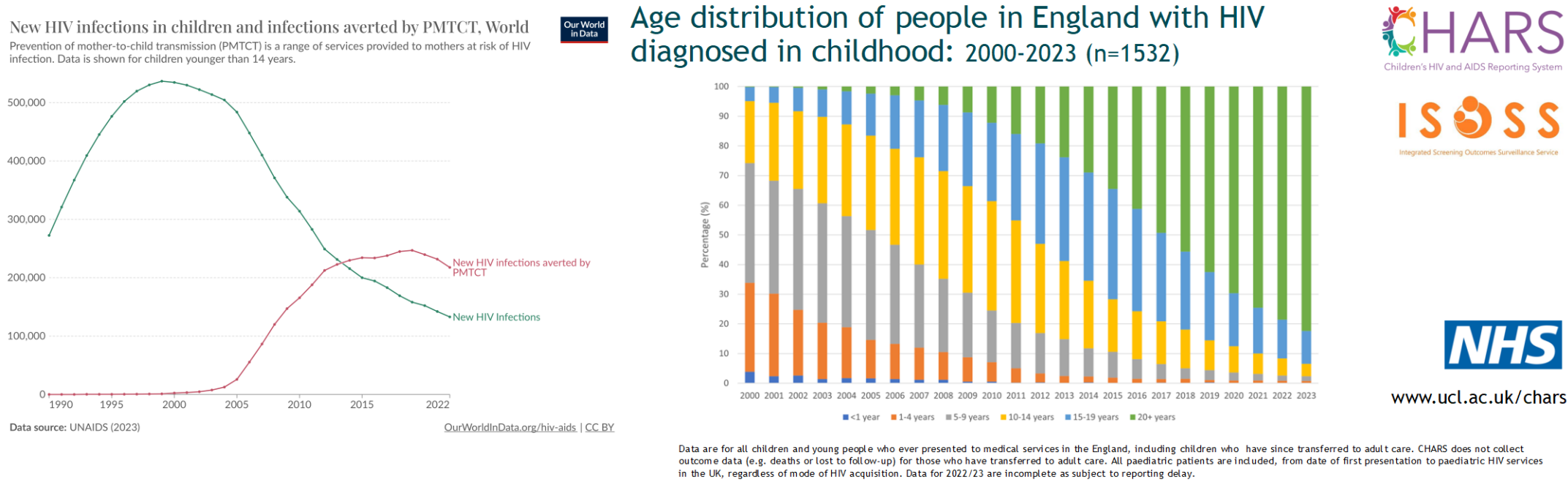
New referrals to a tertiary paediatric HIV service in 2023: An evolving trend?

Karen N McCarthy, Hermione Lyall, Toyin Popoola, Caroline Foster

Department of Paediatric Infectious Diseases, St Mary's Hospital, Imperial College Healthcare Trust

Background

- The number of children living with HIV and accessing healthcare in the United Kingdom (UK) has been steadily declining, as adolescents transition into adult care, and with successful prevention of new vertical transmissions.



- Recent UK Health Service Authority (UKHSA) data, however, suggests an increase in the numbers of adults accessing care, the majority previously diagnosed abroad.
- To evaluate the impact of this trend on paediatric services, we reviewed new referrals to a tertiary London centre in 2023.

Methods

- A retrospective chart review was undertaken of new referrals to a tertiary London paediatric clinic from January 2023 to January 2024.
- Data recorded included: source and nature of referral, demographic details, viral load, CD4 count, anti-retroviral therapy, and details of any opportunistic infections, comorbidities or hospital admissions.
- Data are presented as median with interquartile range.

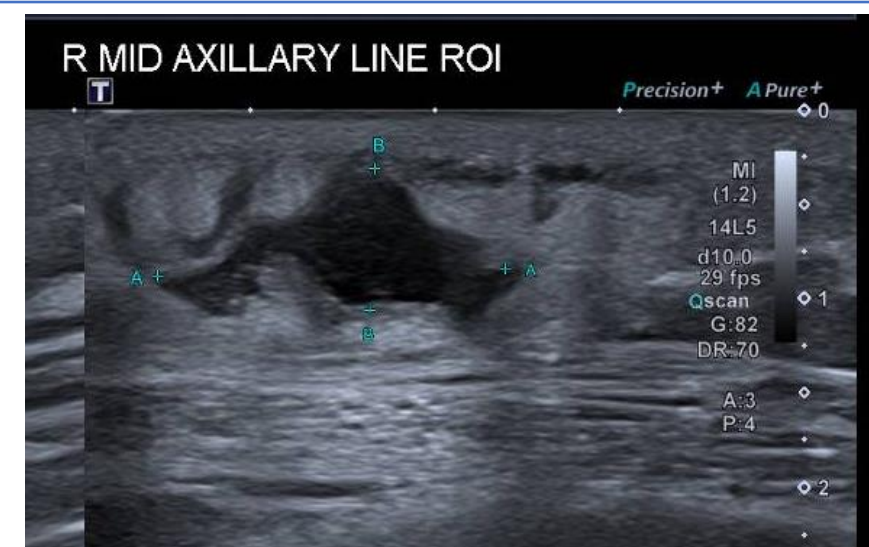
Results

- In 2023 there were 18 new referrals to the St. Mary's Hospital, Paediatric HIV Family Clinic.
- Of these; 3 were new diagnoses, 6 were transfers of care from outside the UK and 9 were transfers of care from other centres in the UK.
- The total number of patients registered with the service increased from 64 to 72 (12.5% increment) from January 2023 to January 2024.
- The median age of the cohort was 14.4 years and this was similar across the three groups. The median age at diagnosis was 1.8 years.

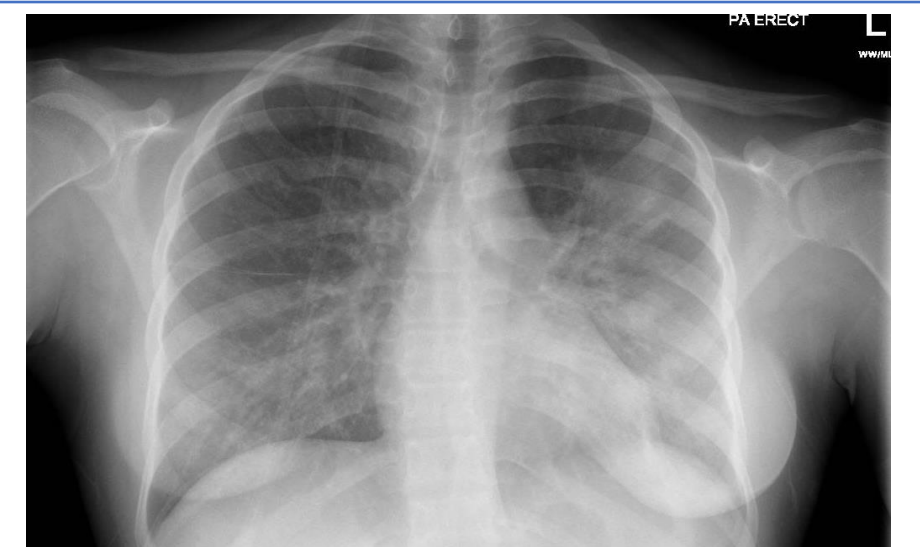
New diagnoses

- The median age of the 3 newly diagnosed patients was 12.3 years, median VL at presentation was 587,000 c/ml (range 436,000-850,000), and CD4 count 234 cells/ μ l (range 29-269)
- The transmission route for each was; perinatal (1), presumed iatrogenic (2).
- All required hospital admission for management for complications:
 - Case 1: PJP pneumonitis, Cryptosporidium, CMV viraemia, HSV stomatitis, atypical mycobacteria and immune reconstitution syndrome (IRIS)
 - Case 2: Prolonged fever, lymphocytic interstitial pneumonitis and HIV encephalopathy
 - Case 3: Arthritis, HIV nephropathy and IRIS.

Parameter	Total cohort	New diagnosis	Transfer of care (outside UK)	Transfer of care (within UK)
Number	18	3	6	9
Age in years (median, range)	14.4 (3.8-18.2)	12.5 (8.9-15.6)	13.4 (3.8-16.1)	15.5 (4.6-18.2)
Age in years at diagnosis (median, range)	1.8 (0.08-15.4)	12.3 (7.8-15.4)	1.8 (0.16-3)	2.5 (0.08-4.9)
Gender (n=female, n=male)	F: 11, M: 7	F:3, M:0	F:3, M:3	F:5, M:4
Ethnicity				
North African	2	1	0	1
South Africa	2	0	2	0
West Africa	3	2	1	0
Central Africa	0	0	0	0
Eastern Africa	5	0	3	2
Eastern Europe	1	0	0	1
Not documented	5	0	0	5
Country of Birth				
North African	1	1	0	0
South Africa	2	0	2	0
West Africa	3	2	1	0
Central Africa	0	0	0	1
Eastern Africa	4	0	3	0
Eastern Europe	0	0	0	0
UK	8	0	0	8
Not documented	0	0	0	0
Viral load at initial contact (median, range)	<20 (<20-850,000)	587,000 (436,000-850,000)	25.5 (<20-343)	<20 (<20-212)
Most recent viral load	<20 (<20-215)	158 (<20-215)	All <20	All <20
Absolute CD4 Count on initial contact (median, range)	673 (29-1536)	234 (29-269)	922.5 (621-1536)	672 (449-1123)
Most recent absolute CD4 Count (n=5)	470 (91-934)	470 (359-588)	-	-
Resistance profile				
No PI, NRTI or NNRTI resistance	7	3	1	2
Resistance detected	3 (NNRTI)	0	0	3
Not performed because insufficient virus	8	0	5	3
Prior ART				
Yes	15	0	6	8
No	3	3	0	0
Details of regimen known				
Known	13		4	9
Partial	2		2	0
Unknown	0		0	0
Change of therapy upon consultation				
Yes	4	0	5	0
No	9	0	1	7
Planned	2	0	0	2
Commenced therapy	3	3	0	0
Comorbidities				
Yes	7	3	1	6
No	11	0	5	3
Additional medications				
Yes	6	3	0	3
No	12	0	6	6
Hospital admission required				
Yes	9	3	4	2
No	9	0	2	7
Opportunistic Infections				
Yes	7	2	2	3
No	11	1	4	6



US: Subcutaneous tissue measuring 1.9 cm x 1.1 cm by 0.8 cm. The surrounding tissue is echogenic and appears thickened with increased Doppler flow in keeping with inflammatory change.
Mycobacterial PCR: Mycobacterium avium intracellulare



CXR: Patchy airspace opacification within the left mid and lower zone. Persistent bilateral perihilar bronchial wall thickening and atelectasis behind the left heart border. Slight ground-glass within the right lower zone.
Respiratory PCR: PCP and CMV PCR positive



CXR: There is perihilar diffuse shadowing extending to the right middle and left lower lobe.
TB work up: Negative
Imp: lymphocytic interstitial pneumonitis



MRI Brain: Long standing ventriculomegaly, with slow progressive brain parenchymal volume loss. There are no features of acute decompensation.
CSF: Negative
Imp: Neurological deterioration due to HIV Encephalopathy

Discussion

- Paediatric HIV is increasingly rare in the UK, however, missed and late diagnoses continue to occur
- A high index of suspicion and increased physician awareness is required in order to avoid the complications of delayed diagnosis
- The previous trend towards reducing numbers of children living with HIV in the UK has stabilised due to migration. Paediatric services need to take this into account when service planning.