Primary care involvement in HIV

Seminar Two:

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HIV & the GP
The role of General Practice in HIV as a long-term condition

Dr. William Ford-Young
RCGP/BHIVA 25th January 2013
Introduction

- Informal & interactive – learn from each other
- Evidence base & shared experience
- HIV – similar to or different from other chronic conditions?
- Some specifics
- Information resources
- Discussion

Similarities with with other chronic conditions

- GPs deal with chronic conditions all the time
- Patient centred, holistic, GP approach (ICE)
- Share care and information with specialist services
- Long-term relationship with patients, their significant others, in their environment
- Coordinate care between agencies & teams
- Advocacy, information & support
- End of life care
Why is HIV different?

- Discuss

Why is HIV different?

- Stigma
  - Historical
  - Societal/cultural – means of acquisition
- Concerns re
  - Confidentiality
  - Professionals’ knowledge, attitude, understanding
  - Expert patients
- Infectious disease
- Co-morbidity & unknown outcomes
Some background to why we are here

BHIVA Standards 2007
**BHIVA – benefits of extended role of GP**

- Often easier for pts to attend GP than hospital (access to appointments?)
- GPs skilled in long term conditions e.g. CVD, lipids, BP, monitoring renal function, mental health, care of elderly, co-ordination social care
- Some pts have poorer outcomes associated with complex psychosocial issues leading to poor OPD attendance or adherence
- GP care *may* be cheaper (GP involvement may prevent more specialist referral)
- But no evidence that it is cheaper to move HIV care into the community

**BHIVA Standards & Principles in extending Primary Care engagement**

- ...avoid fragmentation of care...all pts networked to specialist services...defined protocols & pathways...urgent referrals
- Good two-way communication
- Every pt must remain under specialist
- Every pt encouraged to register with GP
- Choice for hospital only care or shared care
- Outcomes & adherence to standards & guidelines need monitored (regardless of place of care)
- Clear accountability for governance & funding regardless of place of care
Medfash – Recommended Standard 5

People with HIV should have access to good quality primary healthcare provided by local networks, that are sensitive to the needs of those living with HIV.

…primary care plays an important role in the general health care of people with HIV.

Adopting and publicising policies on anti-discrimination and confidentiality within general practice can increase the proportion of patients willing to disclose their HIV status…enabling better quality primary care.
Medfash St’d 5. Primary Healthcare for people with HIV

- Awareness of services & pathways & communication
- GP can enable access to other & integrated services
- GP teams often best placed to access mental health services
- Prevention (HIV onward transmission) [& co-morbidity]
- See also key interventions & audit indicators

Your practice and HIV
“HIV testing – we’re making it routine”

Broken Cross Surgery
Equal opportunities statement

• Our aim is to provide high standards of care to all our patients, regardless of the nature of their illness

• We intend never to discriminate against people on the grounds of gender, race, social class, age, ability, religion or sexual orientation

• No matter how young or old you are we will not tell anyone else what you tell us without discussion with you first
The GP & HIV

Newly diagnosed or newly registering HIV patient

- Explain confidentiality (whole team) vs secrecy
- Establish information pathways/referral with specialist
- Discuss roles of GP vs specialist (or A&E) & establish terms of accessibility etc. ? Monitoring of immunologically well, ARTs? Who prescribes what. Management of acute illness.

- Health promotion
  - Immunisation
  - Cervical screening
  - Smoking, alcohol, drugs
  - Sexual & reproductive health
  - International travel advice
Communication & Shared Care

- Ensure good 2-way communication between 1 & 2 care
- Different 2 care providers – different formats
- Minimum essentials – significant diagnoses, CD4 & VL, other investigations (QOF), medications, management plan
- Management of acute illness

Immunisation

- “Green book” – www.dh.gov.uk chapter 7 (updated April 2011) based on BHIVA guidelines 2006 but better to see
  HIV Medicine (2008), 9, 795–848 (54p document but all you need to know!)
  [also for children see RCPCH www.rcpch.org.uk or CHIVA www.bhiva.org/chiva]
- Give inactivated vaccines as per usual national guidelines regardless of CD4 but be aware may not mount as good an immune response, “immunisation or boosting of HIV+ve individuals should either be carried out before immunosuppression occurs or deferred until an improvement in immunity is seen”
Generally recommended immunisations

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B</td>
<td>Indication strengthened by other risk factors</td>
</tr>
<tr>
<td>Influenza (incl swine flu) (parenteral only)</td>
<td>Indication strengthened by other risk factors</td>
</tr>
<tr>
<td>Pneumococcal</td>
<td>Indication strengthened by other risk factors</td>
</tr>
<tr>
<td>Tetanus-diphtheria – poliomyelitis (parenteral)</td>
<td>If uncertain vaccination status or travel</td>
</tr>
</tbody>
</table>

Other inactivated vaccines safe in all HIV+ve adults

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthrax</td>
<td>Occupational</td>
</tr>
<tr>
<td>Cholera (WC/rBS) (Dukoral)</td>
<td>Travel</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>Risk groups/travel</td>
</tr>
<tr>
<td>Hib</td>
<td>Risk groups (one as adult)</td>
</tr>
<tr>
<td>Japanese encephalitis</td>
<td>Travel</td>
</tr>
<tr>
<td>Meningococcus (MenC)</td>
<td>Risk groups</td>
</tr>
<tr>
<td>Meningococcus (ACWY)</td>
<td>Travel</td>
</tr>
<tr>
<td>Rabies</td>
<td>Travel</td>
</tr>
<tr>
<td>Tetanus-Diphtheria- Polio (Parenteral)</td>
<td>Travel</td>
</tr>
<tr>
<td>Tick-borne encephalitis</td>
<td>Travel</td>
</tr>
<tr>
<td>Typhoid (VicPS) TyphimVi/Typherix</td>
<td>Travel</td>
</tr>
</tbody>
</table>
Live vaccines

**OK if CD4 count > 200**
- Measles Mumps & Rubella (MMR)
- Varicella
- Yellow fever

**ABSOLUTE CONTRAINDICATION**
- Cholera (CVD103-HgR) (live vaccine with no safety data)
- Influenza (intranasal)*
- Oral poliomyelitis (OPV)*
- Typhoid (Ty21a)
- Tuberculosis (BCG)

*also contraindicated in close contacts

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Recommended for HIV+ve adults if found susceptible

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>CD4 count (cells/µL)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B</td>
<td>Any</td>
<td>All measles IgG seronegative persons. Rubella seronegative women of child-bearing age</td>
</tr>
<tr>
<td>MMR</td>
<td>&gt;200</td>
<td>All VZV IgG seronegative persons</td>
</tr>
<tr>
<td>Varicella</td>
<td>&gt;400 Consider if &lt;200</td>
<td></td>
</tr>
</tbody>
</table>
Cervical Screening

- HPV related disease more common in HIV+ve women
- Annual smears should be performed with closer surveillance and lower threshold for colposcopy
- Aidsmap says “women should have a Cx smear on diagnosis, 6m after that then annually”
- What do our laboratories advise us? – do we give them adequate information?

Lifestyle
Lifestyle – smoking, alcohol, drugs, obesity....

- Increased cardiovascular risk, metabolic syndrome and diabetes – HIV/ART related
  - Increased health promotion activity & brief interventions re smoking, diet, exercise, alcohol etc.
- Increased risk of many cancers including lung cancer
  - Increased activity re smoking (tobacco & cannabis)
- Recreational drug/alcohol use may be higher in MSM, CSWs etc, increased risk of unsafe sex, onward transmission of HIV & acquisition of other STIs, BBVs, IDU or non-IDU associated infections.

Sexual & Reproductive Health

- Sexual health support
- Management of STIs
- Management of Hepatitis
- PEPSE
- Pre-conceptual counselling, natural & assisted conception
- Cervical/anal pre-cancers & cancers
- Psychosexual issues
- HIV sexual transmission & ART
- HIV & criminalisation
- Contraception
- Reproductive & sexual health in men
- Erectile dysfunction

BHIVA BASHH & FSRH guidelines - Mx sexual & reproductive health in HIV 2008
Sexual health

STIs Hepatitis

- Initial & FU regular STI screening & treatment
  - Secondary or Primary care?
    - Majority of STIs Rx’d same HIV non HIV
    - Think rashes & proctitis
    - Need PN
    - Good quality health promotional advice

- Hepatitis
  - Initial screen for HAV, HAB & HAC
  - Vaccination B (&A)
  - Annual B&C screen if at risk
  - HIV – HCV coinfection

Sexual health

PEPSE

- UK guideline for use of post-exposure prophylaxis for HIV following sexual exposure (2011)
- Window of opportunity to abort HIV infection by inhibiting viral replication following an exposure (<72 hours)
- Need to be aware local pathways and guidelines
- Risk tables & definition
- Recommended regimes (Truvada & Kaletra) 28 days, support with adherence & side effects. Re-testing.

BASHH & BHIVA UK guideline PEPSE 2011
Contraception

- condoms
- HIV+ve women not on ART – all methods available
- choice and information
- COC, POP, patch & implants may be affected by ART and enzyme induction
- IUD, IUS, depot all ok
- emergency contraception – IUD, double Levonelle, ?ellaOne (data yet?)

BHIVA BASHH & FSRH guidelines - Mx sexual & reproductive health in HIV 2008

Erectile dysfunction

- ED common in HIV+ve men (?more common, discuss)
- Similarities & differences in investigation & management
  - PDE5 inhibitors
  - Intracorporeal alprostadil – injection & BBVs Syphilis etc.
- Loss of desire
  - oestrogen/testosterone balance altered with ART
- Delayed ejaculation
  - Psychological – peripheral neuropathy

BHIVA BASHH & FSRH guidelines - Mx sexual & reproductive health in HIV 2008
Pre-conception & conception advice

- UPSI & discordant couples
- +ve - ve
  - sperm washing
  - Insemination donor sperm
- +ve
  - Expert preconception counselling
  - ART or not ART
  - Expert advice and support in pregnancy, child birth & puerperium & FU of child

BHIVA BASHH & FSRH guidelines - Mx sexual & reproductive health in HIV 2008

Pregnancy & HIV

- RCOG Green-top Guideline 39 BHIVA
- If on ART for own health continue
- If not on ART initiate at 20-28 weeks till delivery
- VL >50 - Elective CS @ 38 weeks
- VL<50 - planned NVD if VL<50 or CS >39 for obstetric reasons
- Avoid breast feeding
HIV sexual transmission & ART

- ART reduces risk of HIV transmission
- Continue to promote condom use
- Detailed counselling but GPs can support basic principles
- Discordant couples
  - Criminalisation
- Concordant couples & risk of superinfection – resistant strains

Anti-Retroviral Treatment (ART)

- When to start determined by patient’s clinical condition, surrogate markers (VL & CD4 count), resistance patterns, specialist advice & (hopefully) informed decisions of the patient
- Combination therapy necessary – may lead to high pill burden
- GPs can help support this process – ART is not an easy ride, significant side effects, hypersensitivities, complications, drug interactions, & strict adherence necessary to avoid drug resistance
ART and the GP

- No need to be experts in mechanism of action or expect to initiate or change therapy, or necessarily prescribe ART.
- Need to support patient and be aware of side effects, serious ones to report to specialist, minor ones to help with symptomatic measures etc.
- Support patient with and emphasise importance of adherence.
- Understand aim to reduce viral load to undetectable in 3-6 months of starting Rx.
- Understand significance of interactions (toxicity or sub therapeutic ART levels & resistance).

ART side-effects

- NAM-AIDSMAP chart (next slides).
- Basic monitoring & management easy in GP if not done in secondary care.
  - FBC, renal & hepatic function, lipids & glucose, B12 etc.
  - ECG
  - Skin rashes – minor – serious
  - Mental health – minor depression – serious psychosis
  - Sleep disturbance
  - Peripheral neuropathy
### Antiretroviral Drug Chart

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Trade Name</th>
<th>Formulation</th>
<th>Standard adult dose</th>
<th>Pill/Day</th>
<th>Major side effects</th>
<th>Food restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTC, Stavudine</td>
<td>Zerit</td>
<td>150mg tablets, 450mg capsules</td>
<td>150mg once a day or 450mg once a day</td>
<td>2</td>
<td>Common: nausea, vomiting, diarrhea, headache, abdominal pain, hair loss, fever, skin rash (difficulty sleeping), rash, headache, neuropathy, joint pain, lactic acidosis, lipoatrophy, liver damage</td>
<td>Take with or without food</td>
</tr>
<tr>
<td>Lamivudine</td>
<td>Epivir</td>
<td>150mg tablets</td>
<td>150mg twice a day or 300mg once a day</td>
<td>1</td>
<td>Common: nausea, vomiting, diarrhea, headache, lactic acidosis</td>
<td>Take with or without food</td>
</tr>
<tr>
<td>Abacavir</td>
<td>Ziprovir</td>
<td>300mg tablets</td>
<td>300mg twice a day or 600mg once a day</td>
<td>2</td>
<td>Common: nausea, vomiting, diarrhea, fever, headache, infections, loss of appetite</td>
<td>Take with or without food</td>
</tr>
<tr>
<td>Tenofovir Disoproxil Fumarate</td>
<td>Viread</td>
<td>300mg capsules</td>
<td>300mg once a day</td>
<td>1</td>
<td>Common: nausea, vomiting, diarrhea, rash, abdominal pain, bone pain, bone loss, gout, pancreatitis, lactic acidosis</td>
<td>Take with or without food</td>
</tr>
<tr>
<td>FTC, Emtricitabine, Tenofovir Disoproxil Fumarate</td>
<td>Truvada</td>
<td>250mg, 300mg, 625mg, 750mg capsules</td>
<td>250mg once a day or 300mg once a day</td>
<td>1 or 2</td>
<td>Common: nausea, vomiting, diarrhea, rash, abdominal pain, bone pain, bone loss, gout, pancreatitis, lactic acidosis</td>
<td>Take with or without food</td>
</tr>
</tbody>
</table>

**Primary care involvement in HIV**
ART drug interactions

- Important to have communication from specialist
- Record on pt repeat Rx screen
  - EMIS & other systems will alert
  - (we record drug, dose & frequency, but quantity of 1 & pharmacy text stating “not to be dispensed in community – hospital dispensing only”)
- Don’t rely on your computer or BNF – use www.hiv-druginteractions.org
- Don’t forget non-prescribed preparations – (herbals, dietary supplements etc)

Drug interactions – case 1

- 45y male on ART 1 year
  - Atazanavir 300mg od
  - Ritonavir 100mg od
  - Truvada 1 od
- VL undetectable CD4 450
- Not started on efavirenz due to PH depression
- Needs a statin (which one?)
- Now depressed & decision to treat with antidepressant
Drug interactions – case 2

- 59y male - PH treatment failure & drug resistance (allergic to penicillins)
  - Darunavir 600mg bd
  - Ritonavir 100mg bd
  - Etravirine 200mg bd
  - Tenofovir 245mg od
- COPD – suggest starting symbicort
- Infective exacerbation – Clarithromycin? Doxycycline

Mental health

- Depression/anxiety
- Insomnia
- Psychosis
- Dementia
  - HIV related or age related
  - When to stop ART
  - End of life care
- Psychosexual
End of life care

- Advance care planning – when to stop medication
- Gold standards framework – palliative care/MDT meetings in practice
- Liverpool pathway for the care of the dying
- Hospice & local support
- Potential problems re family vs carers/significant others
- Wills etc.
- Certification of cause of death

The acutely ill HIV+ patient

- Is it HIV related?
  - CD4
  - Medication
  - Emphasises need for good communication
- Will my management affect HIV management (drug interactions)
- When do I need to d/w HIV physicians?
Further information

www.medfash.org.uk

Further information

- www.medfash.org.uk
- www.aidsmap.com
- www.bhiva.org
- www.hiv-druginteractions.org
- www.hpa.org.uk
- www.rcgp.org.uk
- www.bashh.org
- www.fsrh.org
- www.tht.org.uk
- www.nat.org.uk
- www.hpa.org.uk
- www.rcgp.org.uk
Primary care involvement in HIV

Key Points

- ideal skills
- difference
- confidentiality
- vaccinations
- art
  - adherence
  - side effects
  - drug interaction
- sexual health
  - smears
  - contraception
  - STIs Syphilis & Hepatitis
  - pre-conceptual advice
  - PEPSE
- Mental health
- treatment failure
- end of life care

Thank you
If you can’t prevent it reduce the risks