HIV and Oral Sex - UK History in the 1990s

- Subgroup of EAGA 1992-93
  - 1992 set up
  - 1993 reported to E AGA
  - 1993 Guidance circulated to H Prom Depts
- Controversy and debate 1993-98
  - some thought risk over-emphasised
  - others thought risk underplayed
  - NAM/THT booklet produced 1997
- Reconvened EAGA subgroup 1998
  - Clinician, Dentist, Virologist, Health Prom, Epidemiologist

HIV and Oral Sex - UK History in the 1990s

- Literature summary produced
    - case reports
    - epidemiological studies
    - related transmissions
    - two important epi studies (J AIDS 1993 - Samuel et al)
      (Am J Epi 1997 - Page Shafer et al)
- US summary of world literature published (AIDS - 1998)
- UK summary published as a letter to AIDS 1999

CONCLUSION - Small but real risk - difficult to be sure of magnitude

Acknowledgement to Dr Emma Robinson and Dr Deborah Turbitt

HIV and oral sex

Report produced June 2000 - widely circulated

Update in Commun Disease Report - June 2001

"There is a risk of HIV transmission during unprotected oral sex. This risk is less than from unprotected anal and vaginal sex. The risk of HIV and other sexually transmitted infections can be reduced by using a condom for all penetrative sex, including oral sex. If a condom is not used avoiding ejaculation in the mouth probably lessens (but does not eliminate) the risk of HIV transmission"

HIV and oral sex

Confounders and difficulties

- tendency to ascribe to UAI if UAI has taken place - “masking effect”
- difficult comparison between protected UAI and unprotected oral sex
- knowledge of partner’s HIV status
  - history inaccurate - alcohol, drugs, incorrect information
- facilitators of oral transmission - other STIs, trauma, oral lesions
- epidemiological studies of low risk are difficult to conduct

HIV and oral sex

Mouth Pathology

Complex protection mechanisms

- salivary inhibitors
- washing effect of saliva
- non-specific cellular immune response

- Can be breached by various mechanisms
  - other STIs, micro and macro trauma, oral lesions
- Seminal fluid
  - pre-ejacualate, viral load in semen, other STIs

HIV and oral sex

Has there been any new evidence since June 2000 ?

- San Francisco Studies
- Australian study
- Chelsea and Westminster survey
- PHLS Survey
- PHLS reports

HIV and oral sex

San Francisco Studies

HIV and oral sex

San Francisco Studies

1) Dillon et al 2000 (UCSF - the Options Study)

102 MSM - recent seroconversion

unprotected RAI - 69

unprotected IAI - 14

possible oral sex - 19 Further follow-up - prob not oral 9

insuff follow-up 3

prob oral transmission 8

8 assigned to oral transmission ….. 2 only oral sex

4 protected anal

2 unprotected anal but with documented negative partner

DIFFICULT TO BE SURE WHICH RISK RESULTED IN TRANSMISSION

HIV and oral sex

San Francisco Studies

2) Page Schaffer et al (2001)

198 study participants with only oral sex as HIV risk in previous 6 months

98% had unprotected ROI

20% with known HIV+ve partner - 89% did not use condom

- 40% swallowed ejaculate

One HIV +ve person identified but probably not a recent acquisition

194 x 0.2 x 0.89 x 0.4 x 26 x 1 = 364 partnerships where transmission could have occurred

SAMPLE SIZE TOO SMALL FOR LEVEL OF RISK - but 0% as given

HIV and oral sex

Australian study - SMASH - presented in 2000

prospective cohort study - 700 in follow-up study

75 seroconvertors - 7 cases where oral sex was possible the route of HIV acquisition (denial of anal sex around time of seroconversion)

Researchers felt that the stories did not “hold up” in many of the cases

One case more likely - no history of anal sex

DIFFICULT TO INTERPRET - ON FACE VALUE BETWEEN 1-9%

HIV and oral sex

Chelsea and Westminster study (Khan et al 2000)

- Retrospective questionnaire study of 500 consecutive patients attending outpatients at C&W
- 494 useable questionnaires - mainly but not exclusively MSM
- 6% thought themselves to have been infected via oral sex
- Further follow-up of some of these cases found that this was unlikely for about half of those where follow-up was possible

RETROSPECTIVE SELF REPORTED RISK -approx 3% thought due to oral sex

HIV and oral sex

PHLS Survey

Reply from 92 centres :

- Caring for 4098 HIV infected Patients who are MSM
- Caring for 2821 heterosexually infected patients
- Number thought infected through oral sex
  - MSM 47 in 4098 (1%)
  - Hetero 1 in 2821 (0.04%)

PHLS Survey - 1% MSM

HIV and oral sex

PHLS Reports

January 2000 - Dec 2001

- 2524 reports of new diagnoses in MSM
- 1516 from clinician reports (rest from lab)
- 13 reports overall thought to be due to oral sex (0.5%)
- specific question added on clinician report form
    - since then only 114 of new report forms received
    - 2 oral sex (2%)

PHLS Reports 0.5 - 2% in MSM thought due to oral sex

HIV and Oral Sex

San Francisco	one small study	0%
	another study	8%
Australian study		?9%
	same study interpreted	?1%
Chelsea and Westminster study		6%
	follow-up and reassignment	?3%
PHLS Survey -in MSM		1%
PHLS Reports in MSM		.5 - 2%

HIV and oral sex

Other STIs more of a risk than HIV transmission

Syphilis - Manchester outbreak - 34% thought to be due to oral sex

Gonorrhoea - 19% MSM diagnosed with GC had a throat isolate (GRASP data for outside London)

Viral STIs - (herpes, HPV, etc) known to be transmitted by oral sex

HIV and oral sex

The Risk per sex act depends on…

Known :

likelihood of partner being HIV +ve

sucking partner less likely to infect insertive partner

Likely on basis of other knowledge :

ejaculate in the mouth (though pre-ejaculate is infectious)

oral lesions

source patient’s viral load - plasma and semen

condom use

Not Known :

If spitting or swallowing semen makes a difference

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HIV and oral sex

Take Home Messages

- UAI is still the predominant mode of HIV transmission in newly diagnosed MSM in the UK
- Around 1-3% of new diagnoses in MSM are probably due to oral sex
- People need to be aware that there is a small but real risk of HIV transmission when sero-discordant partners have unprotected fellatio