Anal Cancer in people living with HIV

Prevention, Detection, and Support

Emma Davey
Clinical Nurse Specialist in Palliative Care/ HIV Oncology
Clatterbridge Cancer Centre, Liverpool

www.nhivna.org

nhivna
NATIONAL HIV NURSES ASSOCIATION
support | research | education

Conflict of Interest

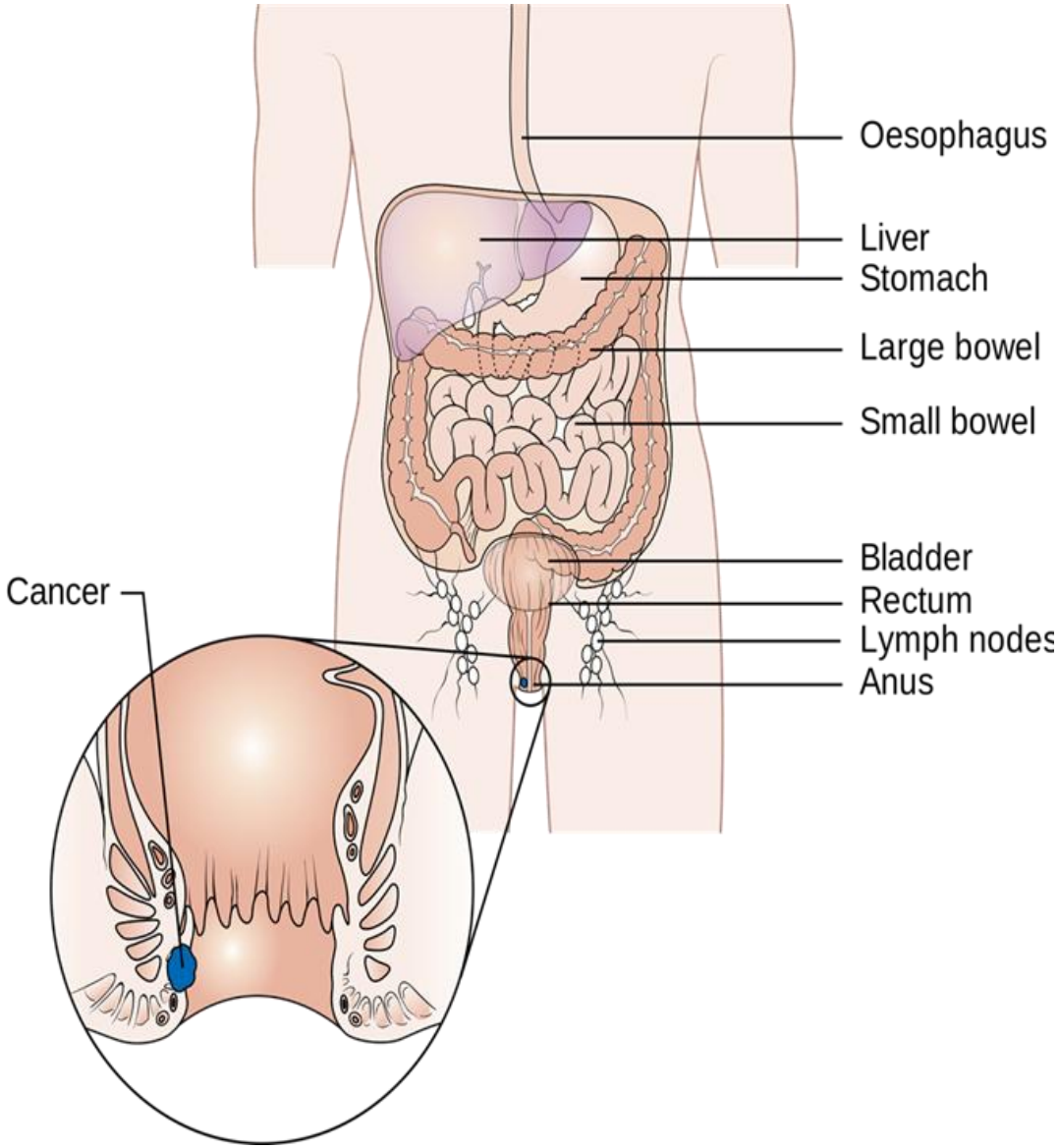
I have received financial reimbursement from ViiV and Gilead for HIV oncology education in the last 12 months.

Speakers are required by the Federation of the Royal Colleges of Physicians to disclose conflicts of interest at the beginning of their presentation, with sufficient time for the information to be read by the audience. They should disclose financial relationships with manufacturers of any commercial product and/or providers of commercial services used on or produced for patients relating to the 36 months prior to the event. These include speaker fees, research grants, fees for other educational activities such as training of health professionals and consultation fees. Where a speaker owns shares or stocks directly in a company producing products or services for healthcare this should also be declared. Finally, other conflicts of interest including expert functions in health care or healthcare guidance processes should be declared (eg if the professional is a member of a health board). The Federation considers it good practice to also make speakers' disclosures available in digital format(s) relating to the educational event.

What is anal cancer

- Anal cancer is a rare cancer.
- Incidence rates: General population: ~1–2 per 100,000
- HIV-positive MSM: up to 80–100 per 100,000

- Risk groups:
- MSM with HIV
- Women with HIV
- History of cervical/vulvar dysplasia



Common Signs and Symptoms

- Bleeding, pain, or itching around the anus.
- Lumps or swelling near the anus.
- Changes in bowel habits or stool shape.
- Discharge or sores that do not heal.

Types of anal cancer

- **SQUAMOUS CELL CARCINOMA (SCC)**

Squamous cell carcinoma (SCC) starts in the outer lining of the anus. Approximately 90% of anal cancers are squamous cell carcinoma and result from HPV most of the time

- **BASAL CELL CARCINOMA**

Basal cell carcinoma is a skin cancer that occurs in the area around the anus. They account for only a very small number of anal cancers and are considered a type of squamous cell carcinoma.

- **ADENOCARCINOMA**

Adenocarcinoma is either in the lining of the anus near the rectum or in the anal glands that produce mucous.

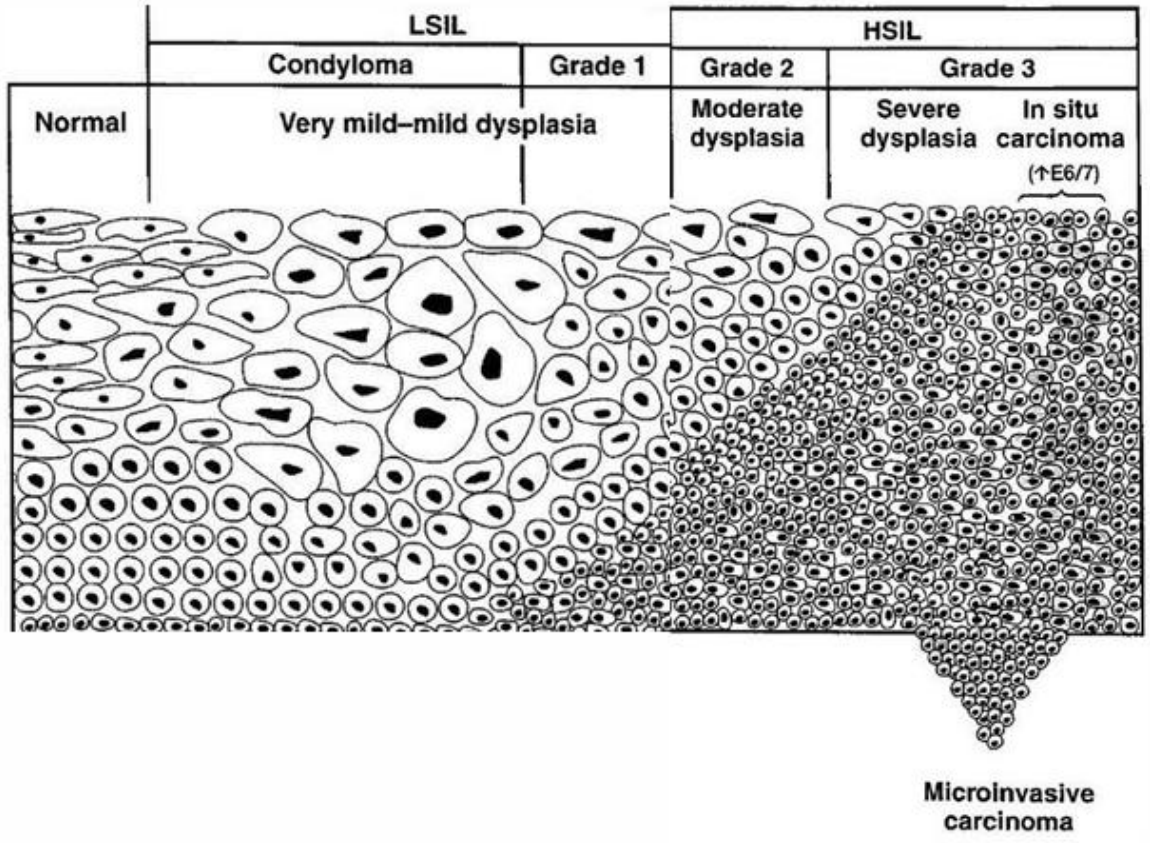
Why Are People Living with HIV at Higher Risk?

- Weak immune system makes it harder to clear HPV infection.
- Persistent HPV infection can lead to anal cancer.
- Risk factors: smoking, receptive anal intercourse, multiple sexual partners.
- Longer survival due to ART means longer exposure to risk factors.

How HPV Causes Anal Cancer

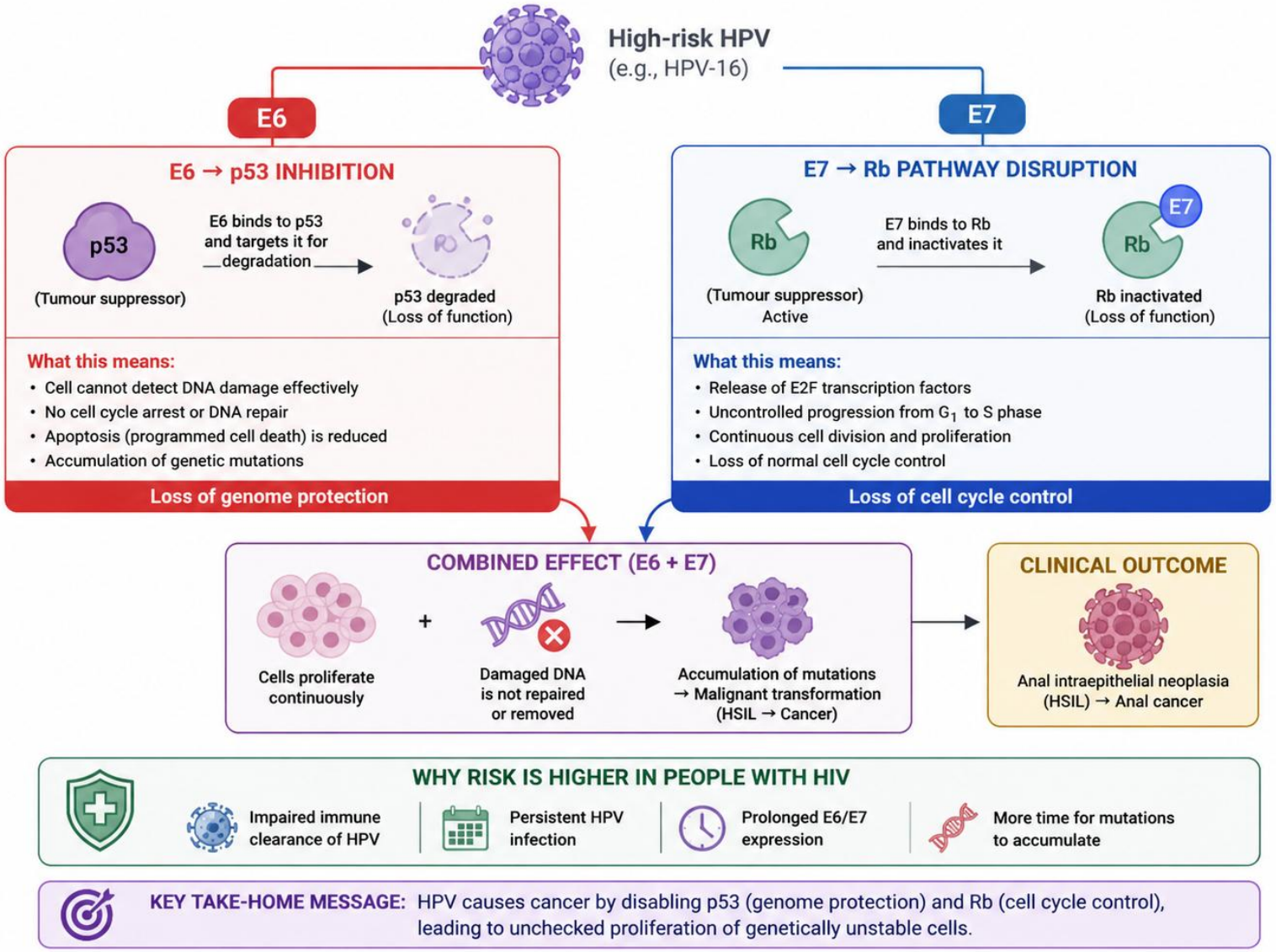
- HPV infects the anal area through sexual contact.
- Infection can cause abnormal cell changes (Anal Intraepithelial Neoplasia).
- If untreated, these changes can become cancerous over time.
- ART helps strengthen the immune system and lower the risk.

AIN = anal intraepithelial neoplasia
SQUAMOUS INTRAEPITHELIAL LESIONS (SILs)



HPV Oncogenic Mechanisms in Anal Carcinogenesis

High-risk HPV (especially HPV-16) drives cancer by disabling key cell cycle control pathways



Screening and Early Detection

- Anal Pap smear: detects early abnormal cells.
- Digital anal exam: a simple yearly check by your healthcare provider.
- High-resolution anoscopy (HRA): detailed look if abnormalities are found.
- Screening is especially important for MSM, women with HPV, and PLHIV.

Cancer: Screening Methods(i)

Anal cancer

Person	MSM and TW aged ≥ 35y, all other individuals aged ≥ 45y, individuals with vulvar HSIL or cancer, regardless of age within one year of diagnosis
Procedure	Symptom review, digital rectal exam and co-testing (anal cytology plus high-risk HPV on anal swab), if a follow-up system is in place. Refer to high-resolution anoscopy, but if not available, refer for proctoscopy +/- biopsy if: ▪ presence of symptoms or abnormal digital anal and rectal examination, OR ▪ any dysplasia (LSIL, ASCUS, ASC-H, HSIL) on anal cytology (and if co-testing is available, with any positive high-risk HPV), OR ▪ positive HPV 16 once, or positive high-risk HPV non-16 subtype confirmed after 6-12 months (even if anal cytology is normal)
Evidence of benefit	Reduces incidence of anal cancer
Screening interval	1 (up to 2 years if both cytology and (HR-HPV or HPV16) neg)
Comment	Refer to the International Anal Neoplasia Society's consensus guidelines *(Stier EA et al, 2024)* for anal cancer screening, for additional detailed guidance regarding the management of screening test results in the context of limited availability of high-resolution anoscopy services

ANCHOR Trial

Objective: Does treating anal HSIL reduce progression to Anal Cancer in people with HIV?

- 👥 **Study Design**
- 4,400 PLWH with biopsy-proven HSIL
- Randomised:
  - Treatment (ablation/topical/surgery)
  - Active monitoring
- 📊 **Key Result**
- 57% reduction in anal cancer incidence

- 💡 **Clinical Impact**
- Treating HSIL = **effective cancer prevention**
- Supports:
  - Screening high-risk HIV populations
  - Referral for HRA and treatment

- ⚠️ **Considerations**
- HSIL recurrence common → ongoing surveillance needed
- Requires specialised services (HRA)
- Cancer risk reduced, not eliminated

Anal Cancer diagnosis and Staging

Biopsy confirmation

Imaging: MRI pelvis/
CT/PET-CT

Staged by TNM

Stage I: Cancer exists and the tumour is 2 centimetres (cm) or smaller.

Stage II: The tumour is larger than 2cm.

Stage IIIA: The tumour is of any size and has spread to the lymph nodes near the rectum or to nearby organs such as the vagina, bladder or urethra.

Stage IIIB: The tumour is of any size and may have spread to the lymph nodes in the rectum, pelvis, and/or groin, and possibly to nearby organs.

Treatment and Care

- Early-stage cancer: combination of chemotherapy and radiation.
- Surgery for persistent or recurrent cases.
- Palliative care for advanced disease.
- Multidisciplinary approach: oncologist, HIV clinician, pharmacist, AHPs.

EACS European AIDS Clinical Society

EACS Guidelines

Search

HIV & Related Infections | Co-morbidities and Other Topics | Medical Secretariat & Members

Cancer: Treatment Monitoring

last updated Oct 3, 2025

- Careful attention must be paid to potential drug-drug interactions between systemic anti-cancer therapy and ART. Advice is available at www.hiv-druginteractions.org
- Chemotherapy and radiotherapy are associated with an unpredictable decline in CD4 counts even in persons stable on ART, OI prophylaxis should therefore be considered at any CD4 count threshold in persons undergoing cancer treatment with chemotherapy and radiotherapy
- Persons affected by Kaposi's sarcoma treated with either liposomal doxorubicin or paclitaxel are not at increased risk of CD4 count decline and standard OI prophylaxis guidelines should be followed, see Opportunisitic Infections section
- One month after the end of the chemo- or radiotherapy treatment we recommend repeating CD4 counts and following standard OI recommendations, see Opportunisitic Infections section
- Persons undergoing autologous or allogenic stem cell transplantation should follow standard national/local guidance for anti-infective prophylaxis

Specific OI prophylaxis recommended in persons undergoing cancer treatment

- PcP prophylaxis
- Fungal prophylaxis, fluconazole 50 mg qd
  Although the evidence for azole antifungal prophylaxis originates from haematological malignancy in HIV seronegative populations, we recommend the use of antifungal prophylaxis in persons with HIV on chemotherapy or radiotherapy especially those affected by haematological malignancies. Fluconazole is the agent of choice because of the favorable interaction profile despite lack of activity against invasive Aspergillosis, see Drug-drug interactions between ARVs and Non-ARVs
- HSV / VZV prophylaxis
- NTM prophylaxis only in those with a detectable plasma HIV viral load

Prevention Strategies

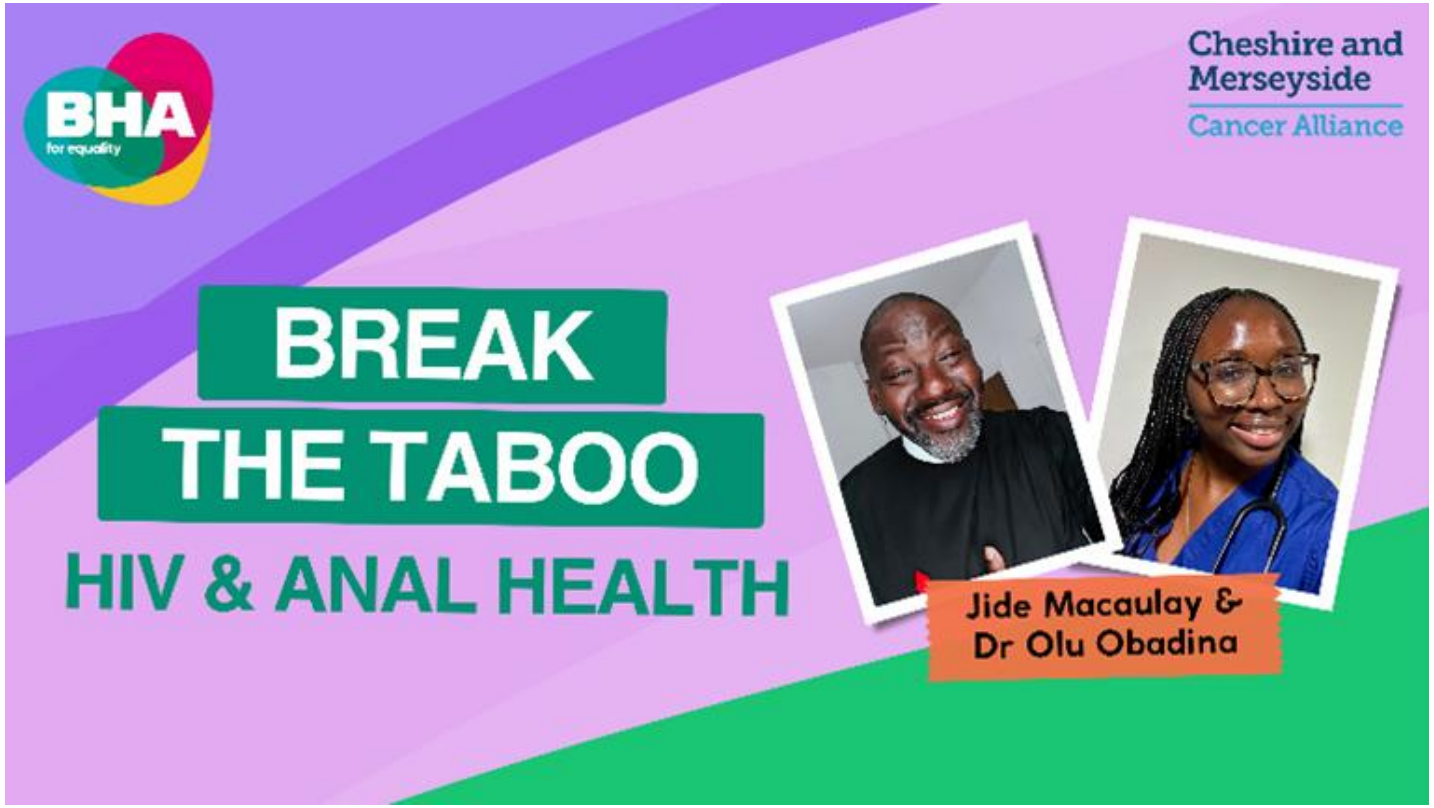
- Get the HPV vaccine (recommended up to age 45).
- Stay on antiretroviral therapy (ART) consistently.
- Avoid smoking and limit alcohol.
- Practice safer sex (use condoms).
- Attend regular check-ups and screenings.

CMCA CAMPAIGNS

- [Campaign raises awareness of anal cancer in men living with HIV :: Cheshire & Merseyside Cancer Alliance]


THE TRUTH ABOUT LIFE IS THAT
SHIT HAPPENS EVERY DAY.
TALK TO US, IF IT DOESN'T.
ASSANA
Chennai's First Colorectal & Gut Wellness Clinic.
Colorectal Consultation | Endoscopy | Gut Wellness | Call +91 93840 17122 | www.assanawellness.com
HAS YOUR LIFE BECOME
A PAIN IN THE ASS?
WE WILL GET TO THE BOTTOM OF IT.
ASSANA
Chennai's First Colorectal & Gut Wellness Clinic.
Colorectal Consultation | Endoscopy | Gut Wellness | Call +91 93840 17122 | www.assanawellness.com
WE TREAT ALL KINDS
OF ASSHOLES.
CALL US, IF YOU'RE LIVING WITH A PAINFUL ONE.
62
9

[Our Health Matters: A Conversation About Anal Cancer - BHA for Equality]



Key Takeaways

• Anal cancer is preventable and treatable when found early.

• People living with HIV should get regular screening.

• ART, HPV vaccination, and healthy habits reduce the risk.

• Don’t ignore symptoms—early action saves lives!

Signposting for more support

Rad Chat | Anal Cancer Series #1: Alex Sparrowhawk and Emma Davey - HIV, HPV, Anal Cancer and the George House Trust

Macmillan Macmillan Cancer Support | The UK's leading cancer care charity

Cancer Research Cancer Research UK

Anal Cancer Foundation The Anal Cancer Foundation

Bottom Line Bottom Line