Does knowledge of HPV status help or hinder cytological interpretation?

ECC Workshop

2nd October 2016

Helen Burrell & Chris Evans

HPV Testing in the UK Screening Programmes

- HPV testing was first evaluated in NHSCSP in 2000 along with LBC for women with Borderline/Low-grade smears (ASCUS/LSIL)

- 2008 HPV triage & Test of Cure (TOC) formally piloted and evaluated.
  - Final report issued 2011 – (Kelly et al; British Journal of Cancer (2011) 105, 983 – 988)

- 2013-2016 HPV Primary Screening formally piloted and evaluated.
  - August 2016 government approval for rollout

HPV Triage

- Women with Low grade abnormality managed according to HPV status
  - 1/3 of women with a borderline/Low-grade smear result returned to routine recall as HPV Neg

- Rapid referral for HPV positive women
  - 64% of women referred directly to colposcopy without repeat cytology
- CIN2+ in some cases

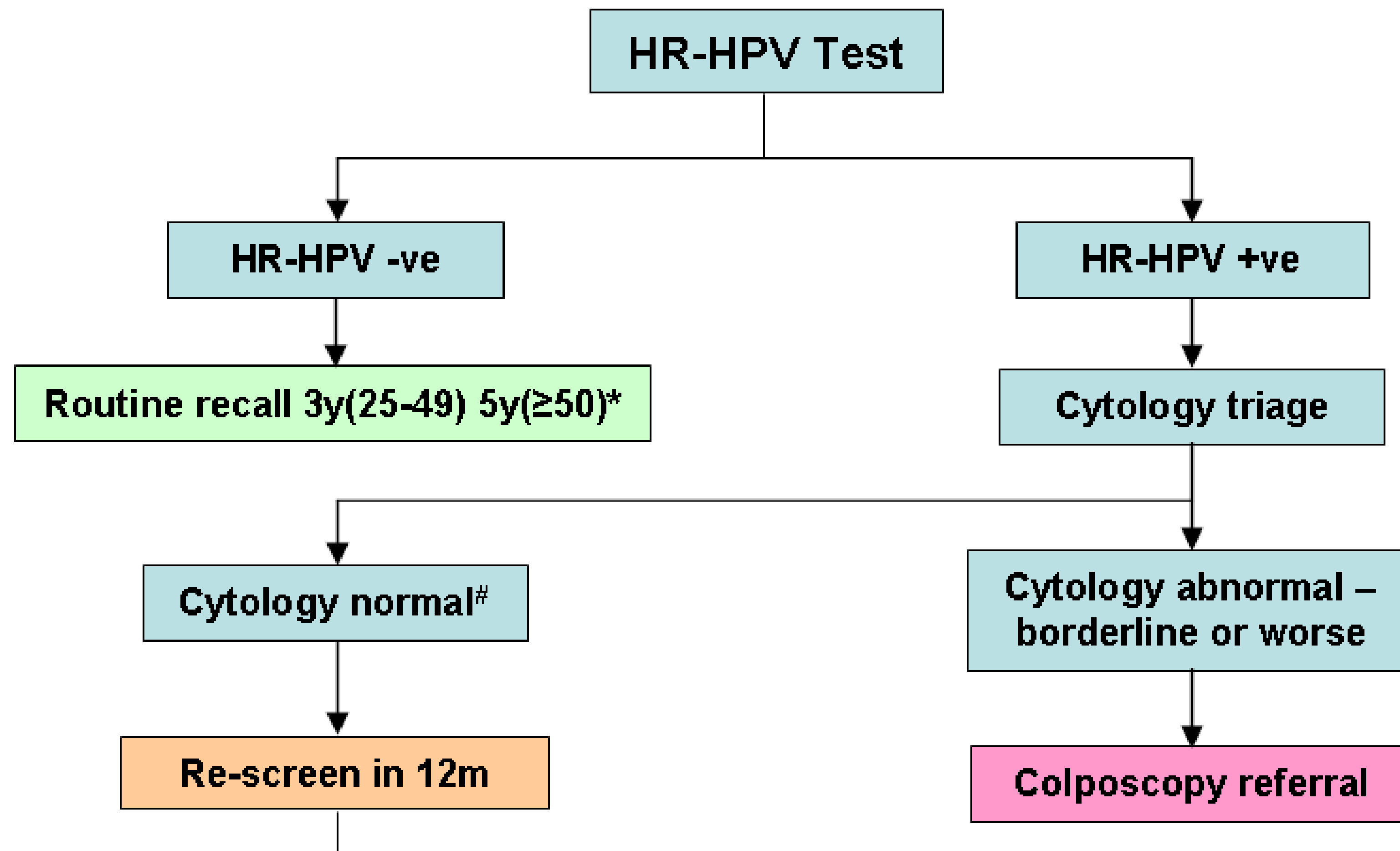
HPV Test of Cure (TOC)

- Post treatment for confirmed CIN and CGIN
- Successful treatment or possible residual disease
- Management according to HPV status if negative/low grade

HPV Primary Screening

- 2013 Pilot Project using hr-HPV testing as the Primary Screening modality with cytology as the triage
  - 6 pilot sites
  - Partial conversion of the screening population
  - Only those ‘smears’ that test POSITIVE for hr-HPV receive cytology.
  - First introduction of bias to the process of cervical cytology screening.

HPV Primary Screening



HPV primary screening

- UKNSC have recommended that this is the way forwards for cervical screening in England
- Government approval August 2016
- To be fully implemented within the English Cervical Screening Programme by 2019

- Implications…

HPV primary screening – different to routine screening

- HPV status is known prior to screening a slide
- Significance?
- Are we overcautious given woman is HPV+
- Are we influenced by knowing a woman will get a 12 month repeat if HPV+/cytology neg?

- New concept for Biomedical Scientists / cytotechnologists
- Learning curve for all
- New skill set – move away from detection to interpretation of cellular features
- Initial increase in referral of slides to Checkers / APs / Cytopathologists

- Impact of bias is limited by quality checks
  - Secondary checks – if used (Checkers)
  - Consultant Cytopathologists / Consultant BMS
    - Gate keepers
    - Rely on morphology to interpret cellular change
- Self audit essential to set internal baseline.
  - Slide review / histological outcome.

Interpretive Pitfalls

- HPV positive rates vary by age
- Diagnostic pitfalls vary by age and hormonal status:
  - Endometrial cells
  - Histiocytes
  - Parabasal cells
  - Metaplastic cells
  - Inflammatory cellular change
  - Etc

Aim of Session Workshop

- 20 cases (TP & SP) with clinical information
- Real cases, some triage and some HPV primary screening cases
- Marks have been placed on slides to highlight cells / groups of interest.
- Encourage you to screen entire slide

Aim of Session Workshop

- **Will you find knowledge of HPV status helpful??**
- Answer/response sheet
- Write down you answers/comments
- Salient points / reports are on the back of the answer sheet
- If you wish to discuss/review slides – double headed microscope available
- Enjoy!!