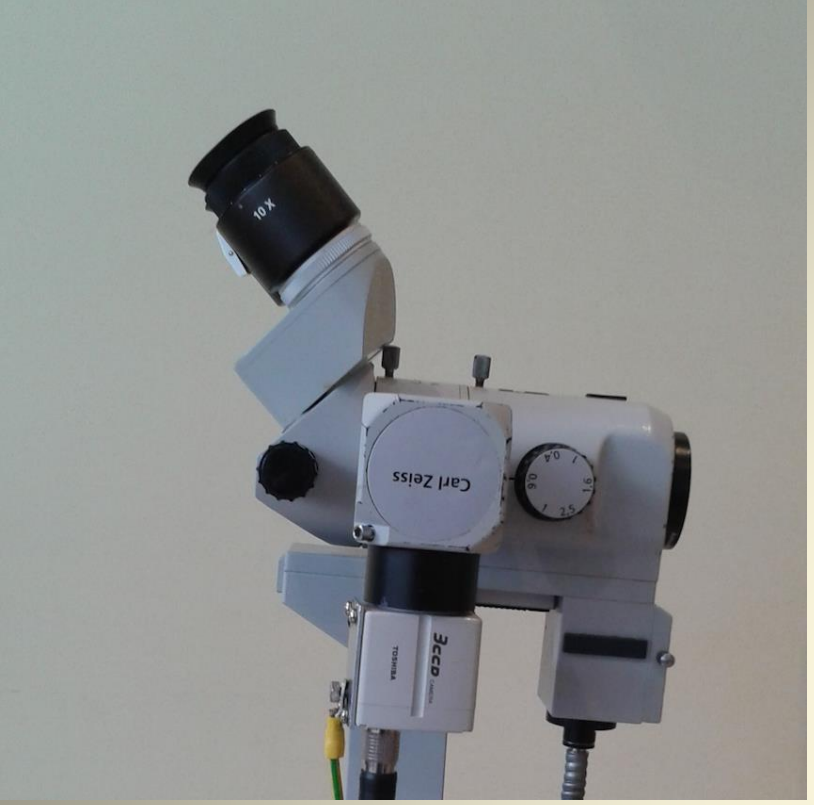
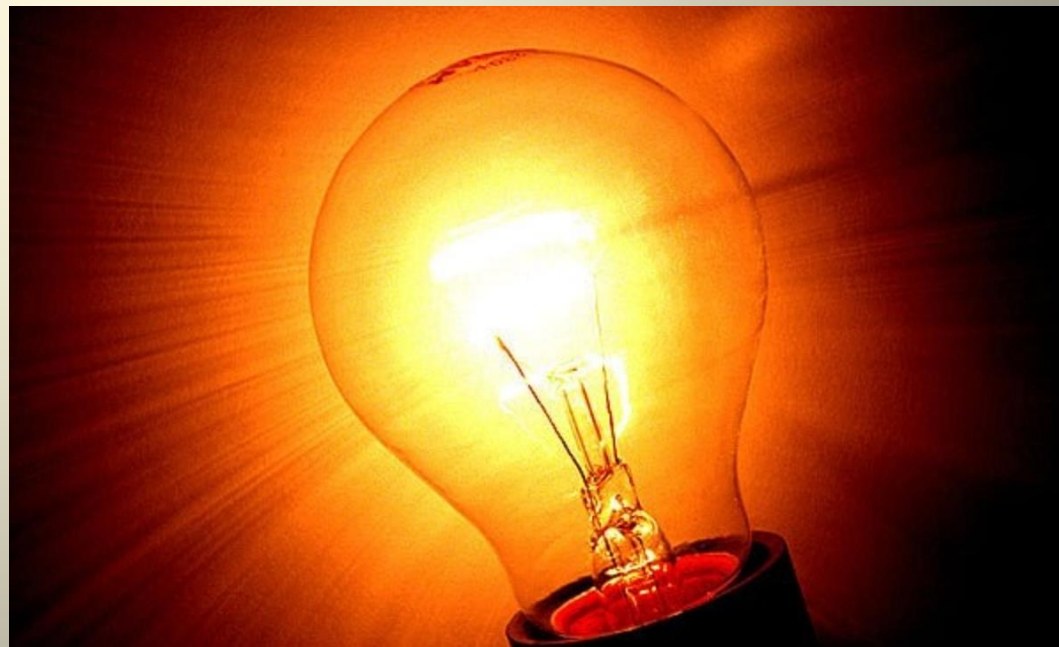


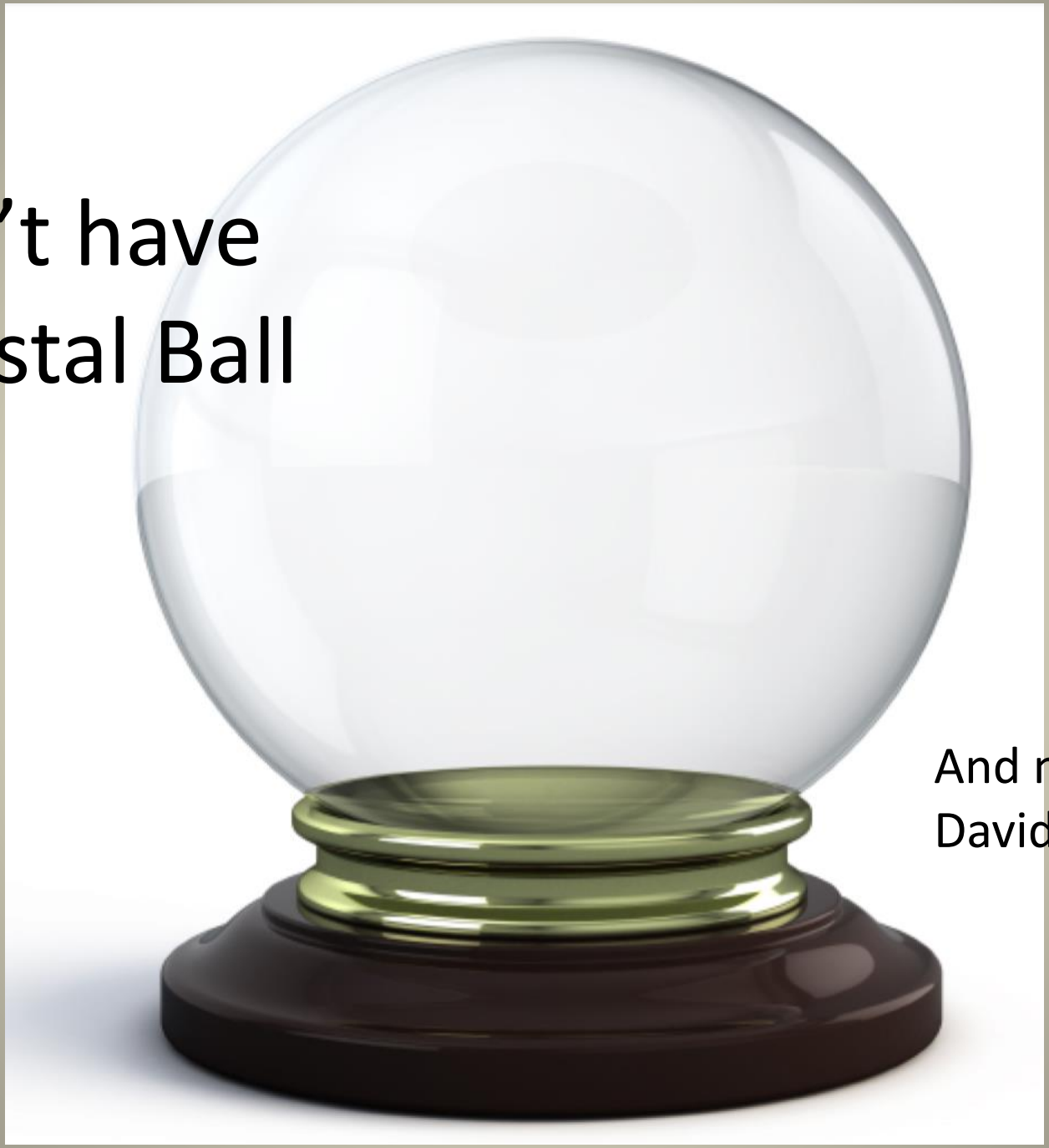
The future of colposcopy is well illuminated!



Disclosures

- I have received royalties from Utah Medical
- I am on the medical advisory board of Zilica
- I am a medical advisor to Liger Medical LLC
- I am a medical advisor to AAYUNA LLC

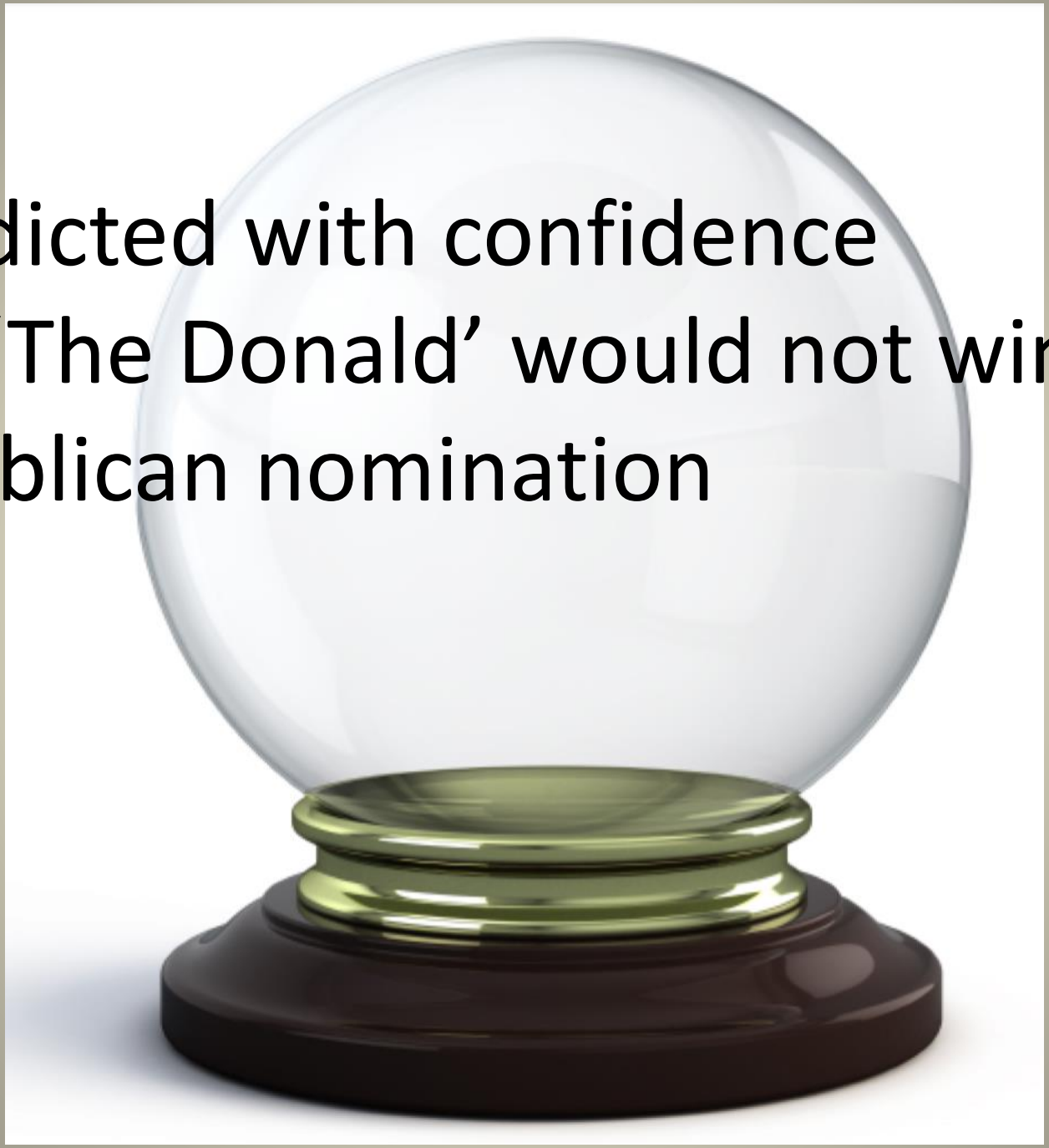
I don’t have
a Crystal Ball



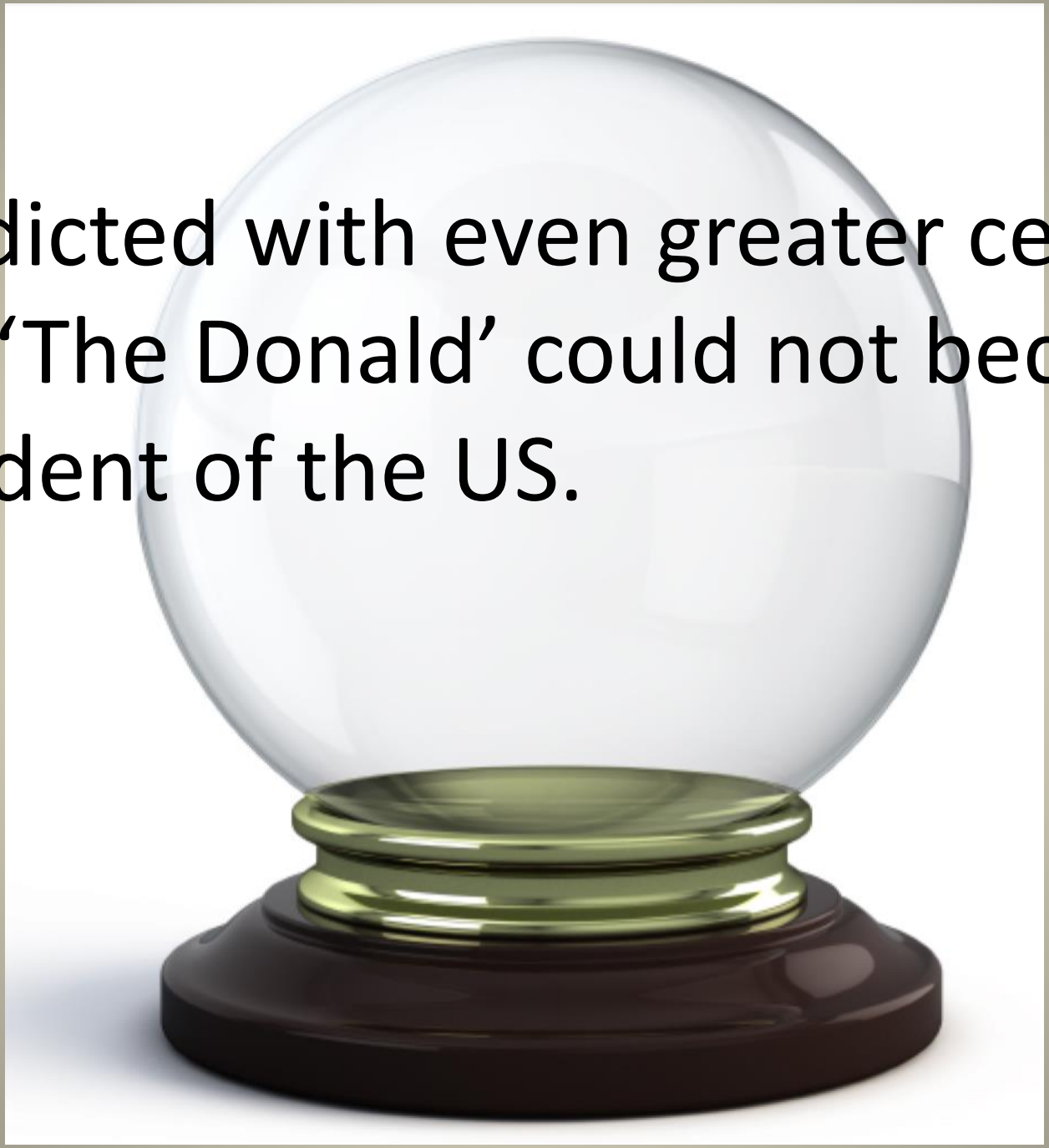
And neither does
David Chelmow

I confidently predicted that the UK would not leave the European Union

I predicted with confidence that ‘The Donald’ would not win the Republican nomination



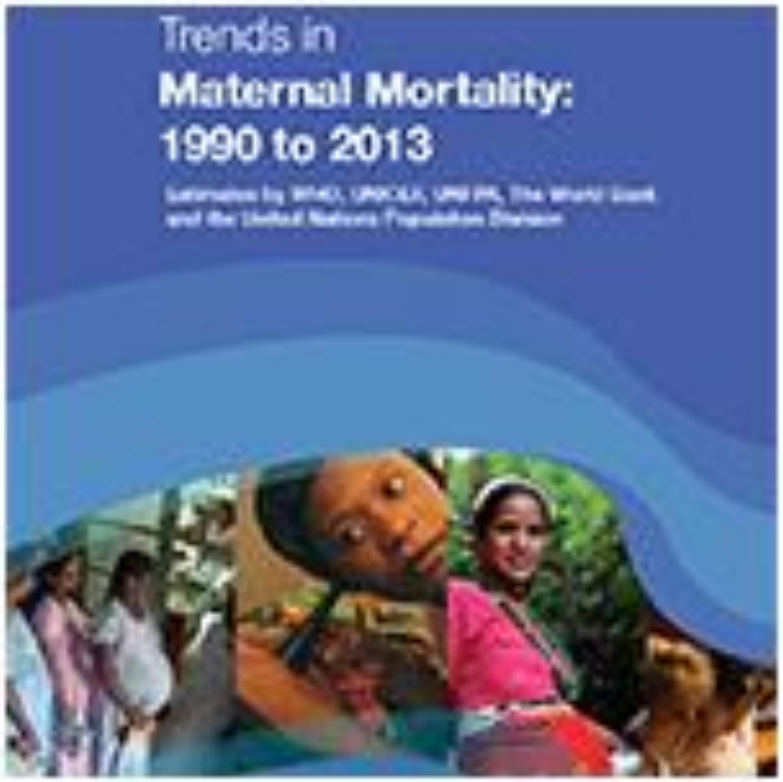
I predicted with even greater certainty
That ‘The Donald’ could not become
President of the US.



But, I also predicted that Ireland Would beat England at Rugby in Dublin last month,,,,, and they did!

Maternal mortality has dropped by 40% over the last two decades

Cervical cancer Mortality rates are actually increasing



The unvaccinated present adult population is unprotected

- Over 3 million women will die from cervical cancer in the next ten years unless prevention is scaled up

  - *Vivien Tsu, Paris 2016*

Screening in emerging regions

- Recent and widespread
- Often by VIA, maybe by HPV
- Will generate large numbers of screen positives who will be best served by colposcopic evaluation & management
- Can colposcopy services cope?
- Is see, screen and treat the answer?

Screen and Treat with VIA

- Best option now, ? sustainable
- VIA or variations of
  - Designed to miss disease
  - Subjective
- CRYO
  - Implementation fraught with problems
  - Expensive, bulky, gas supply
  - Long treatment (3,5,3)

Will VIA take over and we won't need colp

- Up to 30% of +ve VIA cases are not suitable for ablative therapy
- Large or endocervical, lesions should be treated by excision
- Suspected glandular or microinvasive disease , lesions should be treated by excision
- Excision should be performed under colposcopic guidance

Need for colposcopy
Size of Transformation Zone

- **World Health Organization guidelines: use of cryotherapy for cervical intraepithelial neoplasia.**

"Among women with CIN lesions covering more than 75% of the ectocervix, or with lesions extending beyond the cryo tip being used, the expert panel suggests performing or referring for excisional therapy"

Need for colposcopy
Endocervical lesions

World Health Organization guidelines: use of cryotherapy for cervical intraepithelial neoplasia.

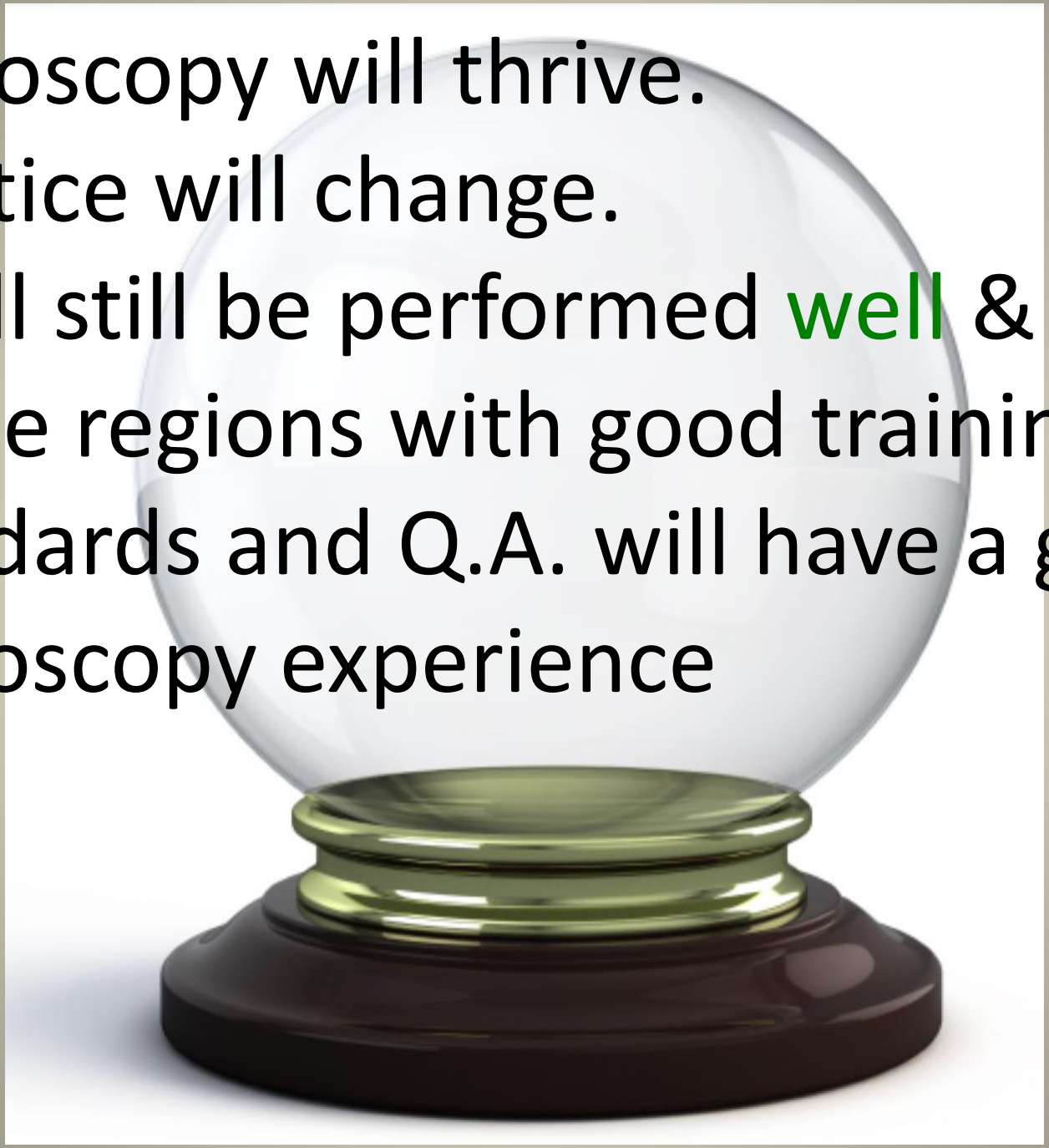
"In settings where LLETZ is available and accessible, and women present with CIN lesions extending into the cervical canal, the expert panel suggests treatment with LLETZ over cryotherapy"

Colposcopy will thrive.

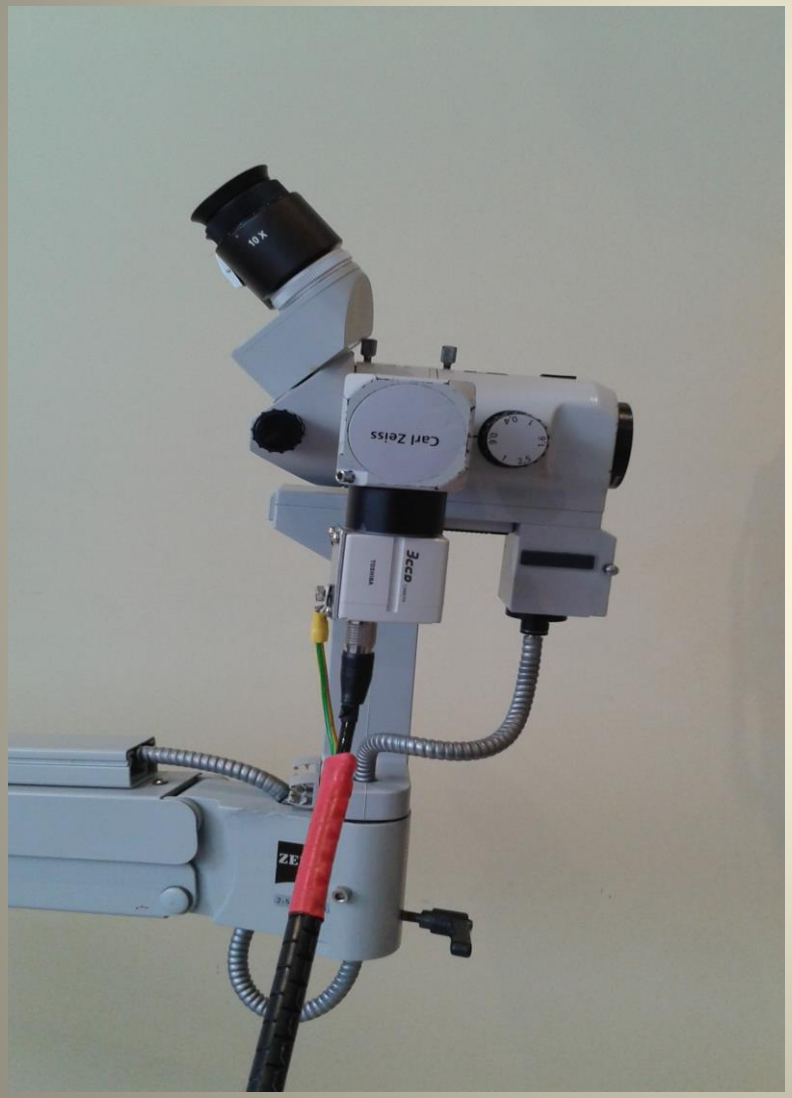
Practice will change.

It will still be performed well & badly

Those regions with good training, standards and Q.A. will have a good colposcopy experience



What is colposcopy?



Light illuminated,

magnified examination

of the lower genital tract

epithelium.

Colposcopy

- Hinselman 1922
- Stafl USA, Jordan UK, Cartier Paris, and many many others
- Has become the instrument par excellence to manage screen positive women
- May be used and abused

What is colposcopy
What is not colposcopy

- **Colposcopy is low powered magnified light illuminated examination of the lower genital tract epithelium, most commonly the cervix.**

- **Colposcopy is not, primarily simply a means of taking a biopsy(ies).**

- ***It is the ideal tool to assess and manage the screen positive woman.***

Colposcopic usefulness

- To screen women for disease
  - Performs poorly diagnostic accuracy relates to prevalence as well as training and Q.A.
- To manage screen +ve women
  - Performs well in the context of a QA service
- To treat women with CIN
  - Performs well and, for excisional procedures, is almost mandatory

Cruickshank et al BSCCP 2011

- 844 Women with BNA or CIN1 smears
- Normal colposcopy, no biopsy
- Followed up with annual cytology and a colposcopy exam at three years
- All exams performed by routine, trained accredited colposcopists
- Very low rate of subsequent CIN at cytology or colposcopy over 5+ years follow up

Cruickshank et al
How reassuring is normal colposcopy

"Conclusion For women with low grade cervical cytology, the riskof a high grade CIN within 3 years of a normal colposcopy examination is low. Women can be reassured that, even with a positive HPV test, the risk of developing CIN2 or worse is sufficiently low to return to the routine 3-year recall".

Colposcopy test characteristics

- Performance will vary according to
  - Screening or diagnostic tool
  - Quality of screening test
  - Reporting of screening test
  - Prevalence of disease in the population being examined
  - Rate of vaccination and frequency of screening
  - Training of colposcopist

Colposcopic usefulness In the treatment of CIN

All treatment for CIN needs a preliminary colposcopic examination

- To determine the TZ Type
- To confirm or refute the suspicion of CIN
- To recognize/rule out cancer or CGIN
- To allow precision in treatment

- Treatment performed under colposcopic vision is superior to naked eye treatment

Excision under colposcopic vision

"LLETZ performed under colposcopic vision allows for the highest probability of

achieving negative margins with minimized depth and volume of excised cervical tissue".

Carcopino et al, (2013) Arch Gynecol Obstet, DOI 10.1007/s00404-013-2882-0

Excision under colposcopic vision

"Direct Colposcopic Vision of excisional treatment is associated with a significant decrease in the volume and in all dimensions of LLETZ / LEEP specimens with no compromise in the margin status".

Preaubert Lise, Gondry Jean, Mancini Julien, Chevreau Julien, Lamblin Gery, Atallah Anthony, Lavoue Vincent, et al. (2016). "Benefits of Direct Colposcopic Vision for Optimal LLETZ Procedure: A Prospective Multicenter Study." Journal of lower genital tract disease 20 (1): 15-21. doi:10.1097/LGT.0000000000000156.

What is a good colposcopy

- Trained colposcopist, adequate equipment
- Relaxed, informed screen +ve patient
- Assistant present, door locked
- Systematically performed
- Properly documented using IFCPC nomenclature
- See and Rx or biopsy as appropriate
- Clear management/F'up plan

What is bad colposcopy

- Poorly trained or inexperienced or infrequent colposcopist
- Inadequate equipment
- Unknown screening test result
- Inadequately counseled patient
- Randomly or too low threshold for biopsy
- Treatment deferred without reason

Screening tests

- Will be more objective
- Will become routinely dual, one more sensitive and the other more specific
- Will become less expensive
- Will not need a laboratory
- Will become more focused

The future

- Colposcopes will become
  - Cheaper
  - Smaller
  - Lighter
  - With smartphone attachments
  - Perhaps with biomedical aids

Gynocular


GYNOCULAR
MAGN.
MODE
gynius
Gynius AB
PO Box 55503
Stockholm
Sweden 10204
CE

Dysis

Z-Scan

Treatment techniques will become better, cheaper, easier

WISAP CC

Liger TC

The future

- Colposcopy will become
  - aided by better diagnostic tools
    - Biomarkers
    - Biomedical devices
    - Image recognition apps

The future

- Colposcopic expertise will be transferred from Europe, Australasia and the Americas to Africa and Asia
- African and Asian National Societies will join the IFCPC
- Vaccination will penetrate across the globe
- We will all hold hands in celebration at the demise of cervical cancer

The future

- Colposcopy will still be practiced poorly
  - By colleagues who do not understand its' true utility or worth and who will use it
    - As a primary screening tool
    - As simply a means of directing a biopsy
    - As a light source

The future

- Colposcopy will still be practiced well
  - By colleagues who do understand its' true utility or worth and who will use it
    - to manage screen +ve women
    - To reassure women with normal epithelium
    - To treat women with a high risk of cancer
    - To take a biopsy where uncertainty prevails
    - To follow up women treated for precancer

Is the future of colposcopy well illuminated?