Expert's Point of View

Management of abnormal cytological findings

edited by **P. Bösze**

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Introduction

The intention of this new series of EJGO is to publish the view of experts in controversial issues. The major aim is to find out the personal approaches rather than reaching consensus. Only a few personal comments will be made. The first set of questions and answers are related to cervical cancer screening, including management of abnormal findings.

1) Atypical squamous cells of undetermined significance (ASCUS) smear

Your patient with ASC-US is 21 years old. What is your first step in management?

Bornstein: Repeat cytology in six months.
Jones: Do reflex HPV testing. Colposcopy only if high-risk HPV+.
Leeson: Colposcopy and punch biopsy of any abnormality.
Ng: Repeat Pap in six months; if the repeat smear is ASC-US/LSIL, routine screening every six months instead of one year for two years.

What is your approach if:

a) satisfactory colposcopy, no abnormal findings

Bornstein: Repeat cytology in six months.
Jones: Repeat cytology in 12 months.
Leeson: Repeat cytology in six months.
Prendiville: I would reassure the patient and advise a repeat smear in two or three years.

b) satisfactory colposcopy, fine mosaic pattern and punctation with smooth surface and slight acetowhiteness

Bornstein: Cervical biopsy.
Jones: No biopsy, repeat cytology in one year.
Leeson: Multiple punch biopsies.
Prendiville: I would reassure the patient and advise a follow-up smear in one year and a follow-up colposcopic examination or consultation in 15 to 18 months.

c) satisfactory colposcopy, high-grade findings, but no atypical vessels

Bornstein: Cervical biopsy.
Jones: Colposcopically directed biopsy.
Leeson: As above in such a young women.
Prendiville: If I suspected CIN3, I would take a colposcopically directed biopsy.

d) unsatisfactory colposcopy

Bornstein: Repeat cytology in six months.
Jones: Minor lesion externally - cytology in 12 months; high-grade lesion externally - biopsy and endocervical currettage (ECC).
Leeson: Six weeks local estrogen and repeat colposcopy.
Prendiville: Why, do you mean because the transformation zone (TZ) is type 3 or infective or for some other reason? Whatever the situation I would try to correct it and I would try very hard not to treat this young girl.

Your patient with ASC-US us a 37-year-old. What is your first step in management?

Bornstein: HPV test.
Jones: Refer to colposcopy.
Leeson: As above.
Ng: Repeat Pap in six months; if the repeat smear is ASC-US/LSIL, routine screening every six months instead of one year for two years.

What is your approach if:

a) satisfactory colposcopy, no abnormal findings

Bornstein: HPV test and ECC.
Jones: Repeat cytology in 12 months.
Leeson: As above.
Prendiville: Reassure, probably do a hybrid capture 2 (HC2) but either way, reassure with follow-up cytology, if HC2 is not available, in one year.

b) satisfactory colposcopy, fine mosaic pattern and punctation with smooth surface and slight acetowhiteness

Bornstein: Cervical biopsy.
Jones: Colposcopically directed biopsy.
Leeson: As above.
Prendiville: Probably similar approach to above.

c) high-grade findings, but no atypical vessels

Bornstein: Cervical biopsy.
Jones: Colposcopically directed biopsy.
Leeson: Discuss with patient but may consider loop excision. Alternative – multiple punch biopsies.
Prendiville: If I suspected a CIN2+ lesion I would have a low threshold for LLETZ. I might take a directed biopsy, if there was a clear area of CIN2+.

d) unsatisfactory colposcopy

Bornstein: Colposcopy-directed biopsy and ECC.
Jones: Biopsy any external lesion and ECC.
Leeson: Six weeks local estrogen as above and reexamine.
Prendiville: Why, do you mean because the TZ is type 3 or infective or for some other reason? Whatever the situation I would try to correct it and I would try very hard not to treat this woman.

2. Low-grade squamous epithelial lesion (LSIL) smear

Your patient with a LSIL is 21 years old. What is your first step in management?

Bornstein: Colposcopy.
Jones: Refer to colposcopy.
Leeson: Repeat cytology in six months.
Ng: Repeat Pap in six months; if the repeat smear is ASCUS/LSIL, routine screening every six months instead of one year for two years.

What is your approach if:

a) satisfactory colposcopy, no abnormal findings

Bornstein: ECC.
Jones: Repeat cytology in 12 months.
Leeson: If a patient has persistent low-grade changes only then would I perform colposcopy. Then in this situation I would arrange repeat cytology in six months.
Prendiville: Reassure; Pap in one or two years.

b) satisfactory colposcopy, fine mosaic pattern and punctation with smooth surface and slight acetowhiteness

Bornstein: Cervical biopsy, ECC.
Jones: No biopsy, repeat cytology in one year.
Leeson: Multiple punch biopsies.
Prendiville: Reassure; Pap in one or two years.

c) pronounced atypical changes, but no atypical vessels

Bornstein: Cervical biopsy, ECC.
Jones: Colposcopically directed biopsy.

Leeson: Multiple punch biopsies.
Prendiville: If I suspect CIN 2 then I would still try not to treat her and might take a colposcopically directed biopsy but might also just follow her in the short term.

d) unsatisfactory colposcopy

Bornstein: Colposcopy-directed biopsy and ECC.
Jones: Minor lesion externally – cytology in 12 months. High-risk grade lesion externally – biopsy and ECC.
Leeson: Six weeks local estrogen and reexamine.
Prendiville: As before, try to work out why the colposcopy is unsatisfactory – it's very rarely a permanent problem in a young 21-year-old.

Your patient with LSIL is 37 years old. What is your first step in management?

Bornstein: Colposcopy.
Jones: Refer to colposcopy.
Leeson: Six weeks local estrogen and reexamine.
Ng: Repeat Pap in six months, if the repeat smear is ASC-US/LSIL, routine screening every six months instead of one year for two years.

What is your approach if:

a) satisfactory colposcopy, no abnormal findings

Bornstein: ECC.
Jones: HPV testing in 12 months.
Leeson: Repeat cytology in six months.
Prendiville: Reassure routine cytology follow-up.

b) satisfactory colposcopy, fine mosaic pattern and punctation with smooth surface and slight acetowhiteness

Bornstein: Cervical biopsy, ECC.
Jones: Colposcopically directed biopsy.
Leeson: Multiple punch biopsies.
Prendiville: Reassure routine cytology follow-up, follow-up colposcopy in about a year.

c) pronounced atypical changes, but no atypical vessels

Bornstein: Cervical biopsy, ECC.
Jones: Colposcopically directed biopsy.
Leeson: Multiple punch biopsies.
Prendiville: Depends a little on parity and future fertility aspirations but I would have a low threshold for treatment if I suspected CIN 2+.

d) unsatisfactory colposcopy

Bornstein: Colposcopy-directed biopsy, If no lesions - random cervical biopsies, ECC.
Jones: Biopsy any external lesion and ECC.
Leeson: Six weeks local estrogen and reexamine.
Prendiville: Correct the reason for unsatisfactory colposcopy and repeat the exam.

3. High-grade squamous epithelial lesion (HSIL) smear

Your patient with HSIL is 21 years old. What is your first step in management?

Bornstein: Colposcopy.
Jones: Refer to colposcopy.
Leeson: Colposcopy.
Ng: Refer to colposcopy.

What is your approach if:

a) satisfactory colposcopy, no abnormal findings

Bornstein: Review cytology, random cervical biopsies and ECC.
Jones: Review cytology with pathologist. If confirmed high-grade, repeat cytology and colposcopy in four to six months. (This assumes good colposcopy of the cervix, vagina and introitus by an experienced colposcopist. Otherwise consider immediate referral to an expert colposcopist).
Leeson: Colposcopy and refer to the colposcopic multidisciplinary team (MDT).
Ng: Biopsy and HPV testing.
Prendiville: Review cytology, repeat colposcopy.

b) satisfactory colposcopy, fine mosaic pattern and punctation with smooth surface and slight acetowhiteness

Bornstein: Cervical biopsy, ECC.
Jones: Colposcopically directed biopsy.
Leeson: Colposcopy and multiple punch biopsy.
Ng: Biopsy and HPV testing.
Prendiville: Take directed biopsy and review cytology.

c) pronounced atypical changes, but no atypical vessels

Bornstein: Cervical biopsy, ECC.
Jones: Colposcopically directed biopsy.
Leeson: Loop excision.
Ng: Biopsy and HPV testing.
Prendiville: Take directed biopsy and review cytology.

d) unsatisfactory colposcopy

Bornstein: Random cervical biopsies, ECC.
Jones: Biopsy any external lesion and ECC.
Leeson: If abnormality is suggestive of high-grade disease then loop. If not then give six weeks local estrogen and refer to colposcopic MDT with a view to repeat the colposcopy.
Ng: Biopsy, ECC, and HPV testing.

Your patient with HSIL is 37 years old. What is your first step in management?

Bornstein: Colposcopy.
Jones: Refer to colposcopy.
Leeson: Loop excision.
Ng: Refer to colposcopy.

What is your approach if:

a) satisfactory colposcopy, no abnormal findings

Bornstein: Review cytology, then random cervical biopsies and ECC.
Jones: Review cytology with a pathologist. If confirmed high-grade, repeat cytology and colposcopy in four to six months. (This assumes good colposcopy of the cervix, vagina and introitus by an experienced colposcopist. Otherwise consider immediate referral to an expert colposcopist).
Leeson: Loop excision.
Ng: Excise the abnormal area.
Prendiville: Review cytology; if cytology opinion persists in suspecting high-grade disease and the vagina is normal then I would do a LLETZ.

b) satisfactory colposcopy, fine mosaic pattern and punctation with smooth surface and slight acetowhiteness

Bornstein: Cervical biopsy, ECC.
Jones: Colposcopically directed biopsy.
Leeson: Loop excision.
Ng: Excise the abnormal area.
Prendiville: LLETZ.

c) pronounced atypical changes, but no atypical vessels

Bornstein: Cervical biopsy, ECC.
Jones: Colposcopically directed biopsy.
Leeson: Loop excision.
Ng: Excise the abnormal area.
Prendiville: LLETZ.

d) unsatisfactory colposcopy

Bornstein: Random cervical biopsies and ECC.
Jones: Biopsy any external lesion and ECC.
Leeson: Loop excision.
Ng: Excise the abnormal area and ECC.
Prendiville: Correct the unsatisfactory colposcopy with LLETZ or LLETZ cone.

4. Is your policy the same in case of atypical squamous cells possible high lesion (ASC-H) smear as with HSIL? If not what is the difference?

Bornstein: Same policy.
Jones: No, manage ASC-H like LSIL. Epidemiology is the same as LSIL.
Leeson: No. Manage similar to LSIL with punch biopsies if abnormality and MDT review if normal. If high-grade abnormality for loop.
Ng: Colposcopy and biopsy if needed and HPV testing.
Prendiville: Completely different; depends on the colposcopic findings, my cytologist and how well I know him or her, etc.

5. Atypical glandular cells (AGC)

Your patient with AGC is 21 years old. What is your first step in management?

Bornstein: Colposcopy, ECC.
Jones: Refer to colposcopy.
Leeson: Unusual. If no abnormality at colposcopy for the colposcopic MDT, check finding and if confirmed perform loop.
Ng: Refer to colposcopy.

What is your approach if:

a) satisfactory colposcopy, no abnormal findings

Bornstein: ECC.
Jones: Repeat cytology in 12 months.
Leeson: If 21 then after MDT confirmation for loop.
Ng: Biopsy and ECC.
Prendiville: Reassure, repeat cytology review.

b) satisfactory colposcopy, fine mosaic pattern and punctation with smooth surface and slight acetowhiteness

Bornstein: Cervical biopsy and ECC.
Jones: Repeat cytology in 12 months.
Leeson: Loop excision.
Ng: Biopsy and ECC.
Prendiville: Reassure, repeat cytology, review.

c) pronounced atypical changes, but no atypical vessels

Bornstein: Cervical biopsy, ECC.
Jones: Biopsy external lesion and ECC.
Leeson: Loop excision.
Ng: Biopsy and ECC.
Prendiville: Where are these changes - in the TZ or above it? I would try not to treat this young girl.

d) unsatisfactory colposcopy

Bornstein: Biopsy cervical lesions and ECC.
Jones: Biopsy any external lesion and ECC.
Leeson: If 21 then after MDT confirmation for loop.
Ng: Cone biopsy and ECC. If the histology of the cone biopsy is AIS and/or CIN3 or carcinoma Stage A1, what is your further strategy? Observe if the margin is free, wide excision if the margin is not free.
Prendiville: Correct the reason for unsatisfactory colposcopy.

Your patient with AGC is 37 years old. What is your first step in management?

Bornstein: Colposcopy, ECC, endometrial biopsy.
Jones: Refer to colposcopy.
Leeson: Colposcopy and loop.
Ng: Refer to colposcopy.

What is your approach if:

a) satisfactory colposcopy, no abnormal findings

Bornstein: ECC and endometrial biopsy.
Jones: ECC and endometrial biopsy.
Ng: Cone biopsy, ECC, and endometrium curettage.
Prendiville: I would consult with the cytologist grade of AGC, site of suspected abnormality.

b) satisfactory colposcopy, fine mosaic pattern and punctation with smooth surface and slight acetowhiteness

Bornstein: Cervical biopsy, ECC and endometrial biopsy.
Jones: Colposcopically directed biopsy of external lesion, ECC and endometrial biopsy.
Leeson: Loop excision.
Ng: Cone biopsy, ECC, and endometrium curettage.
Prendiville: I would consult with the cytologist grade of AGC, site of suspected abnormality.

c) pronounced atypical changes, but no atypical vessels

Bornstein: Cervical biopsy, ECC, consider conization, endometrial biopsy.
Jones: Colposcopically directed biopsy of external lesion, ECC and endometrial biopsy.
Leeson: Loop excision.
Ng: Cone biopsy, ECC, and endometrium curettage.
Prendiville: If I suspected high-grade glandular abnormality I would do a cone biospy using a LLETZ or straight-wire excision (SWETZ) technique.

d) unsatisfactory colposcopy

Bornstein: Biopsy cervical lesions if they exist, ECC, endometrial biopsy.
Jones: Colposcopically directed biopsy of the external lesion, ECC and endometrial biopsy.
Leeson: Loop excision.
Ng: Cone biopsy, ECC, and endometrium curettage. If the histology of cone biopsy is AIS and/or CIN3, a further strategy would be to observe if the margin is free - cervical amputation or hysterectomy if the margin is not free.
Prendiville: I would correct the reason for the unsatisfactory colposcopy.

The way I do colposcopically directed biopsy and ECC

Bornstein: Explain to the patient and make sure the pain is minimal so she does not refuse to return. If needed, inject local anesthetic. Do the posterior lip biopsies first. Gentle with ECC. Apply Silver-Nitrate to stop bleeding. The technique itself is standard.
Jones: I usually do the colposcopy-directed biopsy first unless I really suspect an endocervical lesion. Then I would do the ECC first. My cervical biopsy technique is standard. I use Burke or Tischler biopsy instrument. For the ECC I use a small Kevorkian or Townsend endocervical curette with a basket.
Ng: ECC to scrape lightly on the inner cervix using a brush.

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