Livmorhalsscreening i Norge – veien videre

Utfordringer for patologilaboratoriene

Overlege dr.med. A. Kathrine Lie
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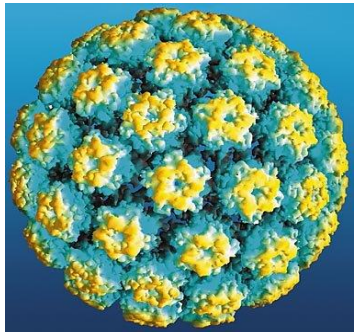
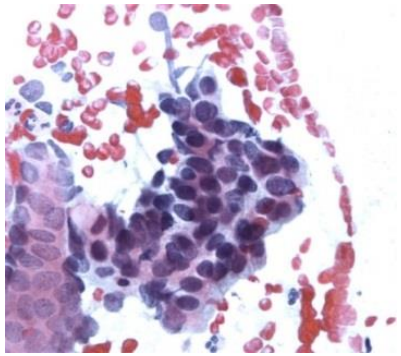
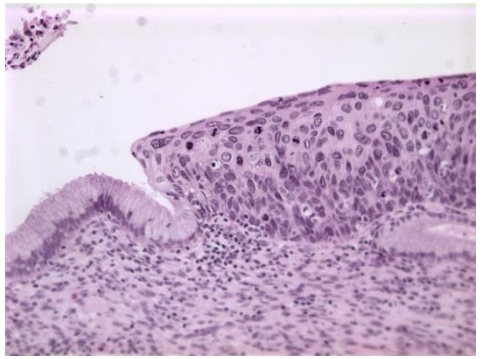
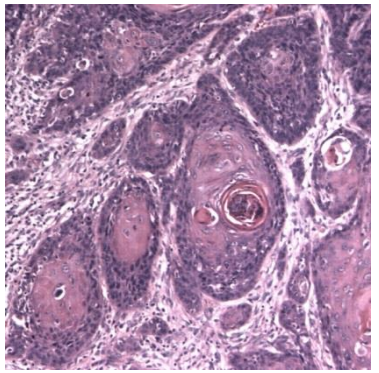








Statistikk 2019

- Screeningpopulasjon i Norge: 1,5 mill. kvinner (25-69år)
- Antall analyser 2019:
  - 410 137 cytologianalyser (derav 18 665 oppfølgningsprøver)
  - 164 107 HPV analyser
  - 41 636 histologiske analyser
  - 7 354 koniseringer
  - 368 cervixkarsinomer

Årsrapport Livmorhalsprogrammet 2019

- 16 cytologilaboratorier og 14 laboratorier utført HPV analyser i screening (inklusive to private)
- 3/16 laboratorier har < 15 000 cervix cytologier per år (minste krav ifølge Kvalitetsmanualen for Livmorhalsprogrammet)
- 12/16 cytologilaboratorier har < 25 000 cervix cytologier per år
- 8/16 cytologilaboratorier og 9/14 HPV laboratorier er akkreditert

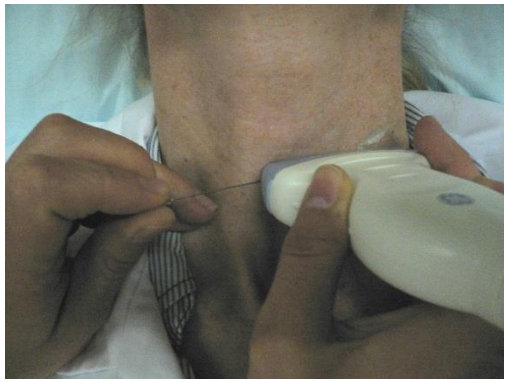
Årsrapport Livmorhalsprogrammet 2019
https://akkreditert.no/akkrediterte-organisasjoner

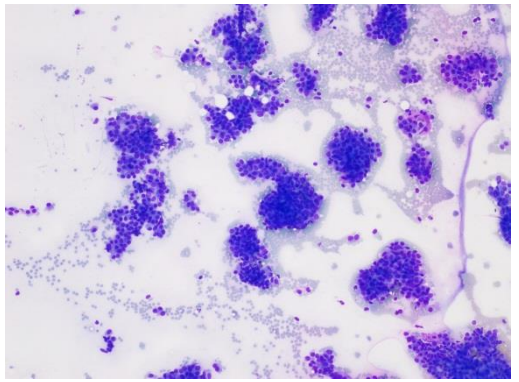
- Implementering av HPV vaksine i 2009 og nasjonal HPV primærscreening fra 2019 vil føre til en stor reduksjon i antall cervixcytologier
- For å opprettholde kompetanse og cytologivolum anbefalte et faglig panel i 2013 en betydelig reduksjon i antall cytologilaboratorier; ned mot 4-5 over en 10 års periode Gruppe Fremtid, 2013, HDir
- Kun Helse Sør-Øst har vedtatt en sentralisering av cervixcytologi og HPV diagnostikken før oppstart av HPV primærscreening; fra 10 til tre laboratorier (OUS, Ahus og SØ)

  Styrevedtak 085/17, HSØ

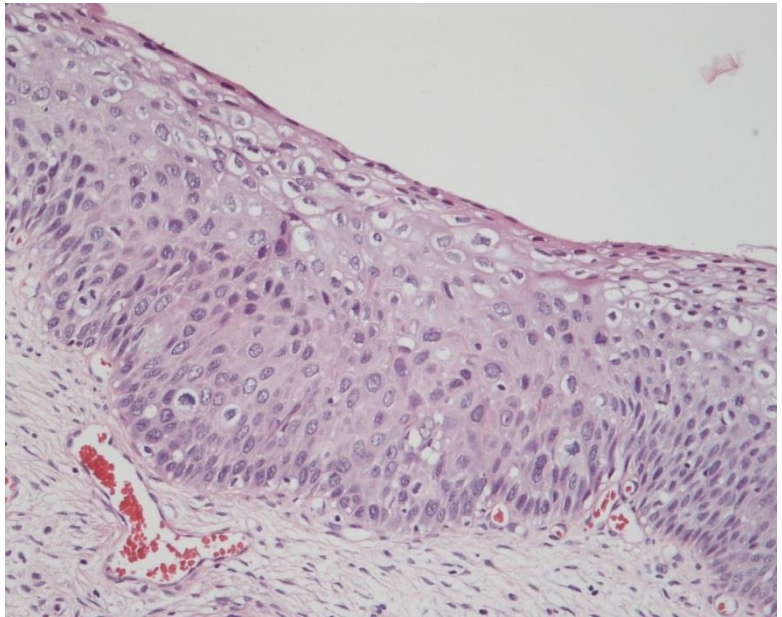
Utfordringer for patologilaboratoriene

- Cytologi og HPV:
  - Hvordan håndtere det økende prøvevolum når diagnostikken sentraliseres?
  - Rekruttering; hva skal screenere gjøre når cytologivolumet reduseres eller sentraliseres og nye molekylære metoder tar over som triage?
  - Non vaginal cytologi skal ikke sentraliseres – hvordan opprettholde kvalitet og robuste fagmiljøer når cervixcytologi forsvinner?





- Histologilaboratorier:
  - HPV primærscreening generer økt prøvevolum
    - Økt antall cervixbiopsier og utskrap
    - Økt antall koniseringer og hysterektomier
    - Økt antall immunhistokjemiske analyser
  - Behov for bedre diagnostikk av forstadier for å unngå overbehandling
    - Nye biomarkører for bedre risikostratifisering
    - Subspesialisering av patologene



IJC
International Journal of Cancer

Recent increase in incidence of cervical precancerous lesions in Norway: Nationwide study from 1992 to 2016

Madleen Orumaa[1], Maarit K Leinonen[1], Suzanne Campbell[1], Bjørn Møller[2], Tor Åge Myklebust[2,3] and Mari Nygård[1]

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[2]Department of Registration, Cancer Registry of Norway, Oslo, Norway
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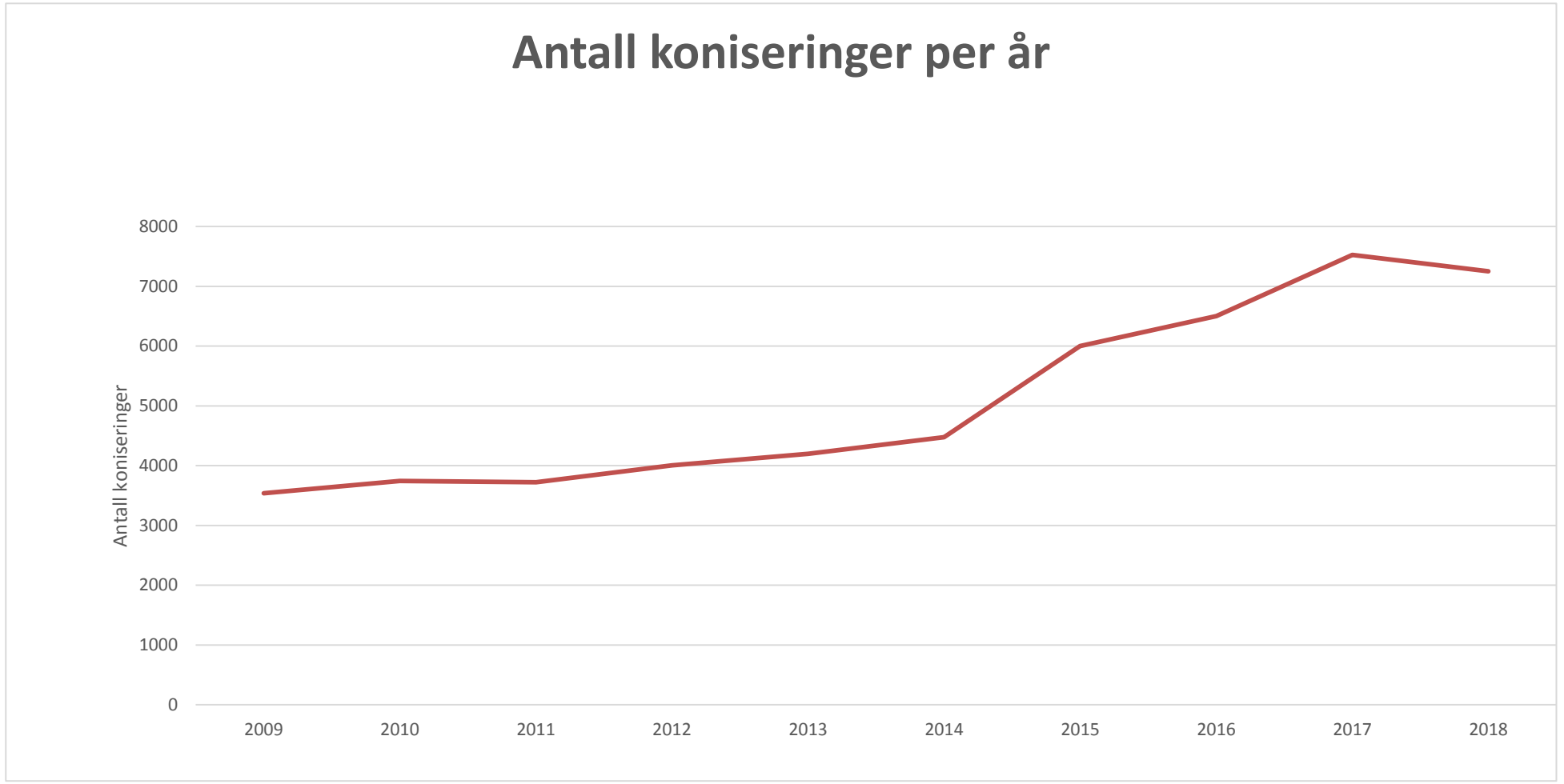
We analysed patterns in the incidence of cervical intraepithelial neoplasia grades 2 and 3 (CIN2, CIN3) and adenocarcinoma *in situ* (AIS) by age and histology in 1992–2016 in Norway and described changes in screening tests. Incident cases of CIN2, CIN3, AIS and cervical cancer were identified in the Cancer Registry of Norway, as were all women with at least one screening test. The annual percentage change statistic was used to assess point estimates and changes in age-specific and age-standardised incidence rates (IR). Women aged 25–29 years had the highest incidence of cervical precancerous lesions (CIN2: 192.9/10, CIN3: 737.2/10, AIS: 32.5/10^5 in 2016). The IR of CIN2 increased for all screening ages (25–69 years) from 3.6% to 6.7% per year. CIN3 incidence increased by 1.6% (95% confidence interval [CI] 0.6–2.6) annually. A steep increase in AIS incidence was observed in all age groups (7.1% per year, 95% CI 5.3–8.8). Changes in screening tests and the histological verification of cervical precancerous lesions alone cannot explain the steady increase in incidence we observed over the 25-year study period, and increased exposure to human papillomavirus (HPV) likely plays a role. Age-appropriate treatment of screening-detected cervical precancerous lesions is needed for effective cervical cancer control while avoiding overtreatment and related health risks. In order to perform an appropriate harm-benefit evaluation of cervical cancer control efforts, detailed information on screening technology and background risks, including HPV vaccination status, is needed to create optimal public health policy.

Cancer Epidemiology

Int J Cancer: 145, 2629-38 (2019)

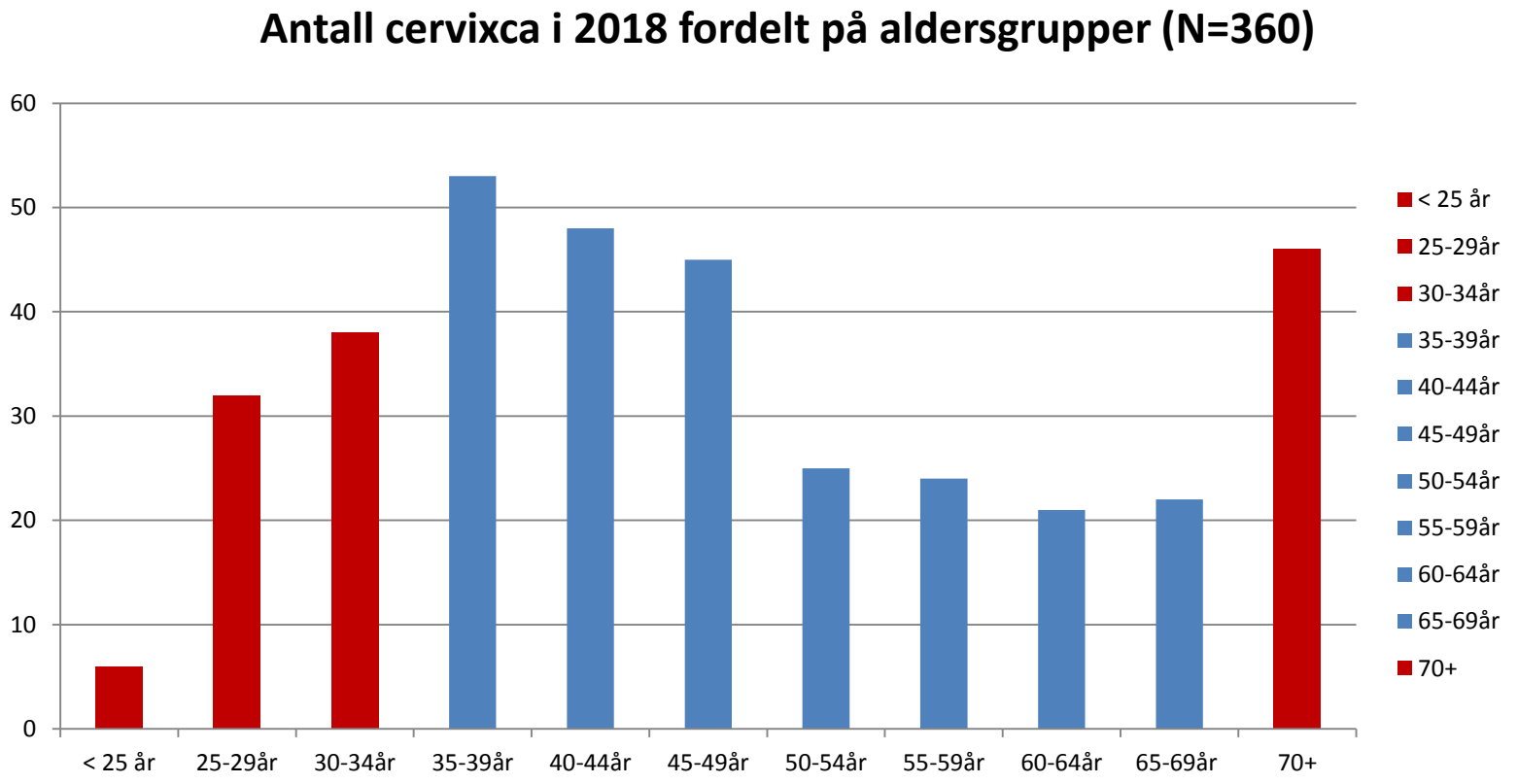

Antall koniseringer per år
Antall koniseringer
8000
7000
6000
5000
4000
3000
2000
1000
0
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018

Årsaker til økende forekomst av koniseringer

- Bedre registrering
- Endrete seksualvaner og økt forekomst av HPV infeksjoner gir økt forekomst av høygradige celleforandringer som må behandles
- Økende forekomst av diagnostiske koniseringer ?
  - I 2019 hadde 7% av koniserte kvinnene persisterende HPV før behandling, normal/uegnet/lavgradig cytologi og normal/lavgradig preoperativ histologi. Kon viste ingen funn eller CIN 1

Birgit Engesæter, Kreftregisteret

66% av cervixca påvises hos kvinner som ikke deltar i Livmorhalsprogrammet.



Cancer in Norway 2018

Gravdal et al. BMC Women's Health (2021) 21:110
https://doi.org/10.1186/s12905-021-01242-3

BMC Women's Health

RESEARCH ARTICLE Open Access

Cervical cancer in women under 30 years of age in Norway: a population-based cohort study

Brit Helene Gravdal[1], Stefan Lönnberg[2], Gry Baadstrand Skare[2], Gerhard Sulo[3] and Tone Bjørge[1,2*]

Abstract

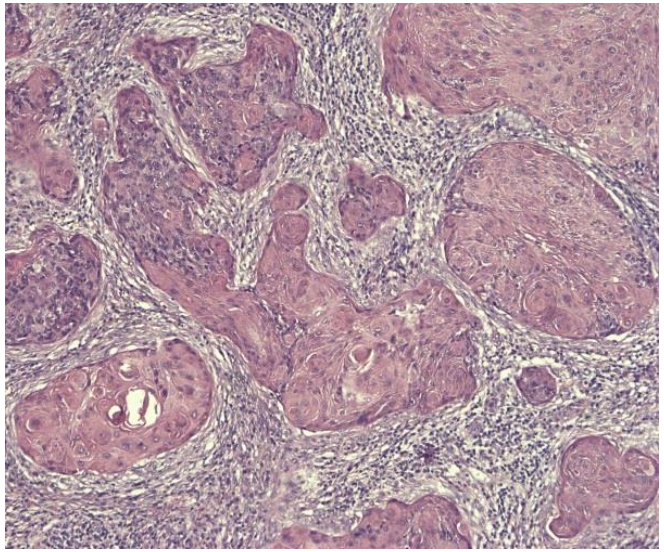
Background: We compared women with incident cervical cancer under the age of 30 with older women with regard to stage, morphology, screening history and cervical cancer mortality in a population-based cohort study.

Methods: We included data from the Cancer Registry of Norway. Incidence rates (per 100,000 women-years) were calculated and joinpoint regression was used to analyse trends. The Nelson-Aalen cumulative hazard function for risk of cervical cancer death during a 15-year follow-up was displayed. The hazard ratios (HRs) of cervical cancer mortality with 95% confidence intervals (CIs) were derived from Cox regression models.

Results: The incidence of cervical cancer in women under the age of 30 has almost tripled since the 1950s, with the steepest increase during 1955–80 (with an annual percentage change (APC) of 7.1% (95%CI 4.4–9.8)) and also an increase after 2004 (3.8% (95%CI -1.3–9.2)). Out of 21,160 women with cervical cancer (1953–2013), 5.3% were younger than 30 years. A lower proportion of younger women were diagnosed at more advanced stages and a slightly higher proportion were diagnosed with adenocarcinoma and adenosquamous carcinoma comparing women above 30 years. The cumulative risk of cervical cancer death was lower for patients under the age of 30. However, the difference between the age groups decreased over time. The overall adjusted HR of cervical cancer mortality was 0.69 (95% CI 0.58–0.82) in women diagnosed under the age of 30 compared to older women.

Conclusion: There has been an increase in cervical cancer incidence in women under the age of 30. Cervical cancer in younger women was not more advanced at diagnosis compared to older women, and the cervical cancer mortality was lower.

Keywords: Cervical cancer, Young women, Population-based



Nær tredobling av antall tilfeller livmorhalskreft blant kvinner < 30år siden 1953.

Gravdal et al. BMC Women's Health 2021

Oppsummering

- Innføring av HPV primærscreening påfører økt arbeidsmengde for patologilaboratoriene
  - Genererer økt antall biopsier, koniseringer og hysterektomier
  - Helse Sør-Øst sentraliserer nå cytologi- og HPV diagnostikken fra 10 til 3 laboratorier (SØ, Ahus og OUS) og innfører nye plattformer for automatisert cytologiscreening og utvidet HPV genotyping for bedre risikostratifisering av kvinner med positiv HPV test

- HPV vaksinasjon, self-sampling og nye biomarkører vil på sikt medføre reduksjon i antall celleprøver som skal mikroskoperes.
- For å opprettholde kompetanse i cervixcytologi og etablere robuste fagmiljøer med tilstrekkelig forskningskompetanse, er det nødvendig med ytterligere sentralisering i de øvrige helseregionene.
- Automatisert cytologiscreening bør innføres nasjonalt; gir bedre logistikk og økt kvalitetssikring Rebolj et al, BMJ 2015
- Patologilaboratoriene må bygge opp forskningskompetanse og kunne evaluere nye biomarkører for bedre risikostratifisering av kvinner med positiv HPV test og biopsier med CIN 1-2.