

# WHAT IS THE PICTURE FOR PAPILLOMAS AND RADIAL SCARS TWO YEARS ON FROM THE IMPLEMENTATION OF NEW NHS BREAST SCREENING PROGRAMME B3 LESION GUIDANCE?

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## PURPOSE

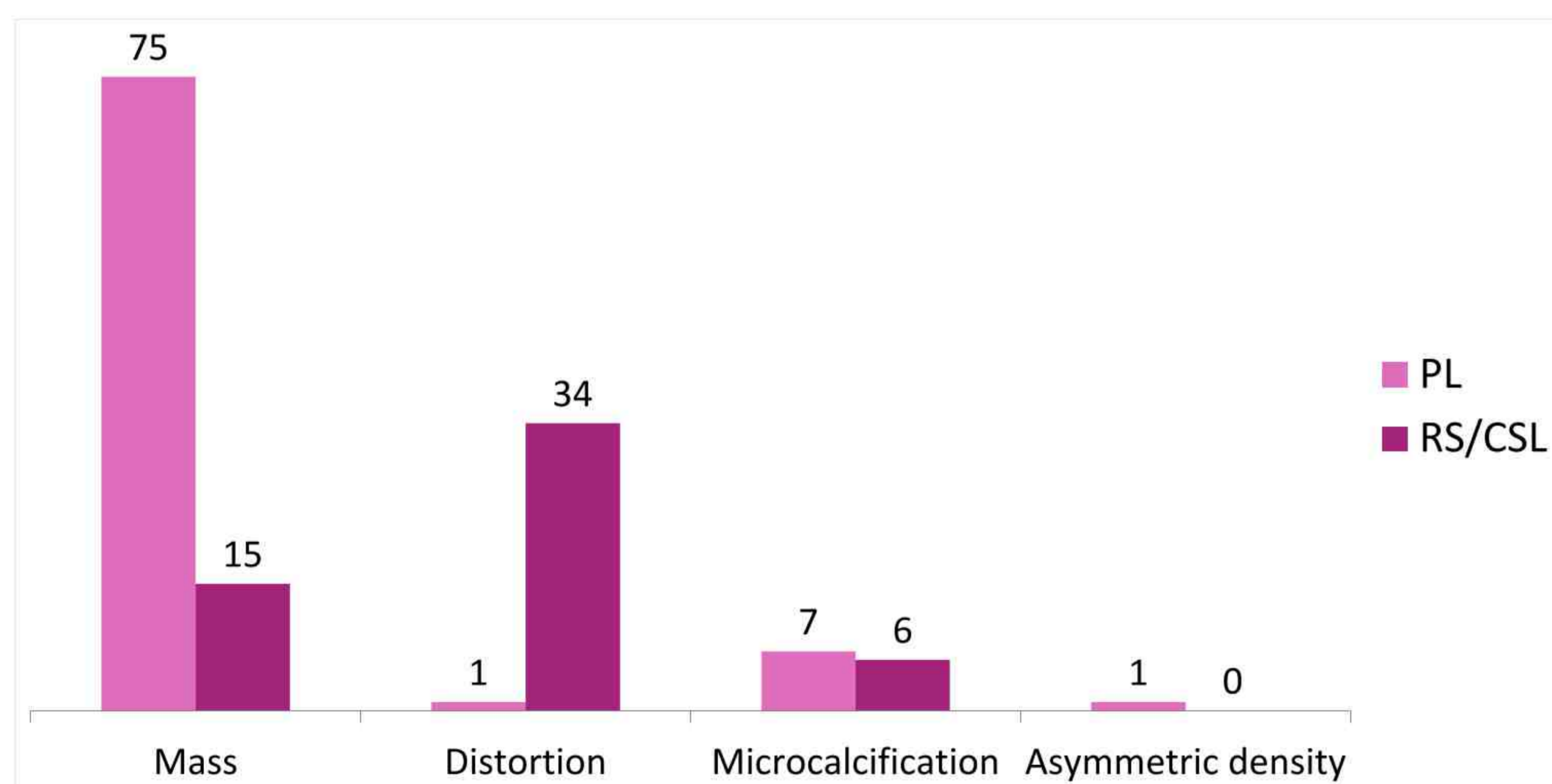
In 2016, guidance was released for the management of B3 lesions. Guidance is to perform vacuum assisted excision (VAE) for papillomas with no atypia and for radial scars/complex sclerosing lesions (RS/CSL) lesions shown on diagnostic biopsy. Surgical excision should be performed on papillomas when atypia is present. We have audited adherence to guidance and upgrade rates to malignancy.

## METHOD

Papillomas and RS/CSL diagnosed within screening and symptomatic women between 01/01/2017 to 30/01/2019 were identified using the pathology database. For each lesion, imaging features and type of initial biopsy was documented. The initial histology, including presence of atypia, and histology from VAE or surgical biopsy were recorded. Upgrade rates to malignancy were quantified.

## RESULTS

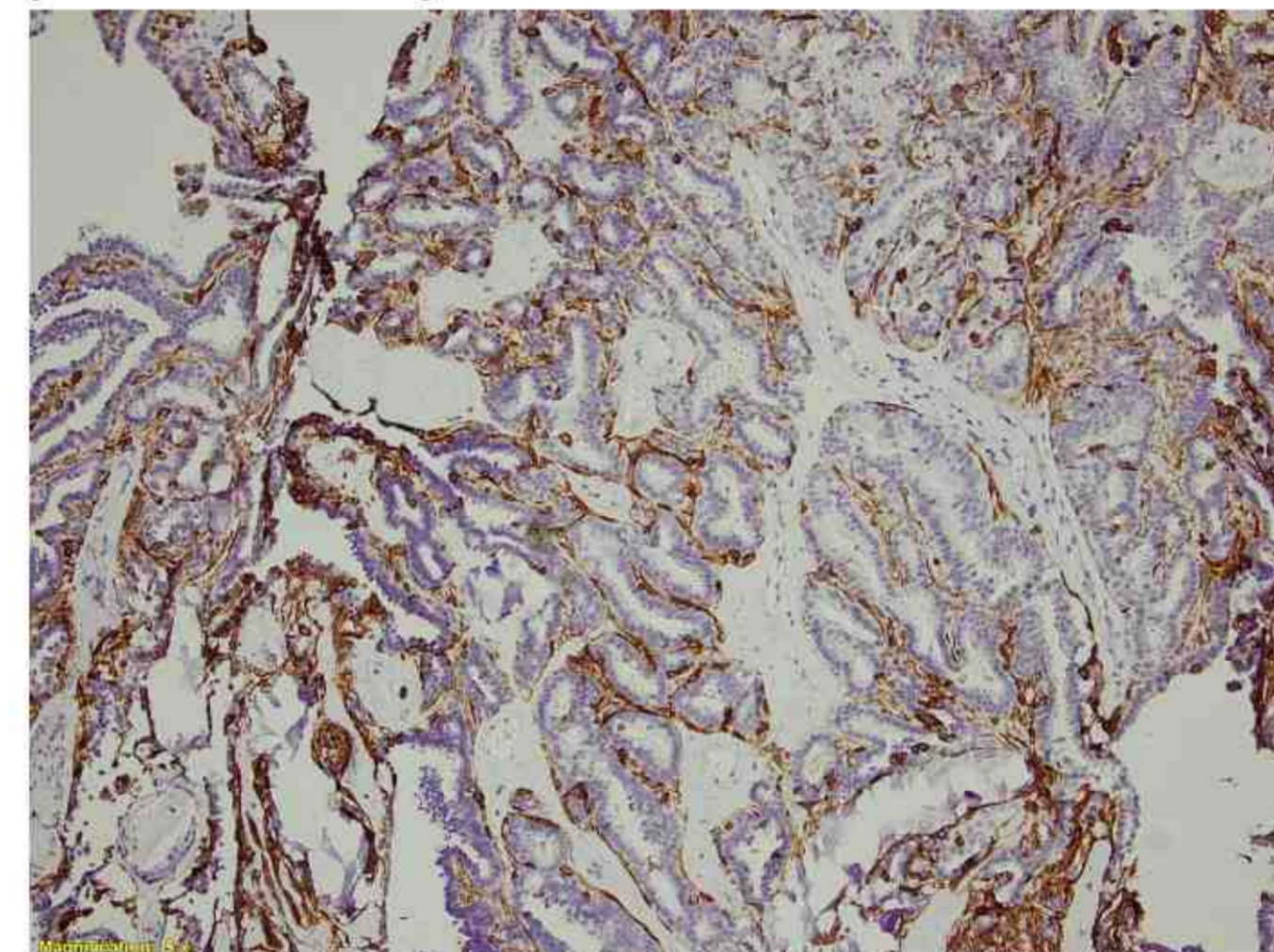
148 lesions were identified. Nine were excluded due to synchronous cancer in the same breast, leaving 139 lesions. The size range was 2-80 mm.



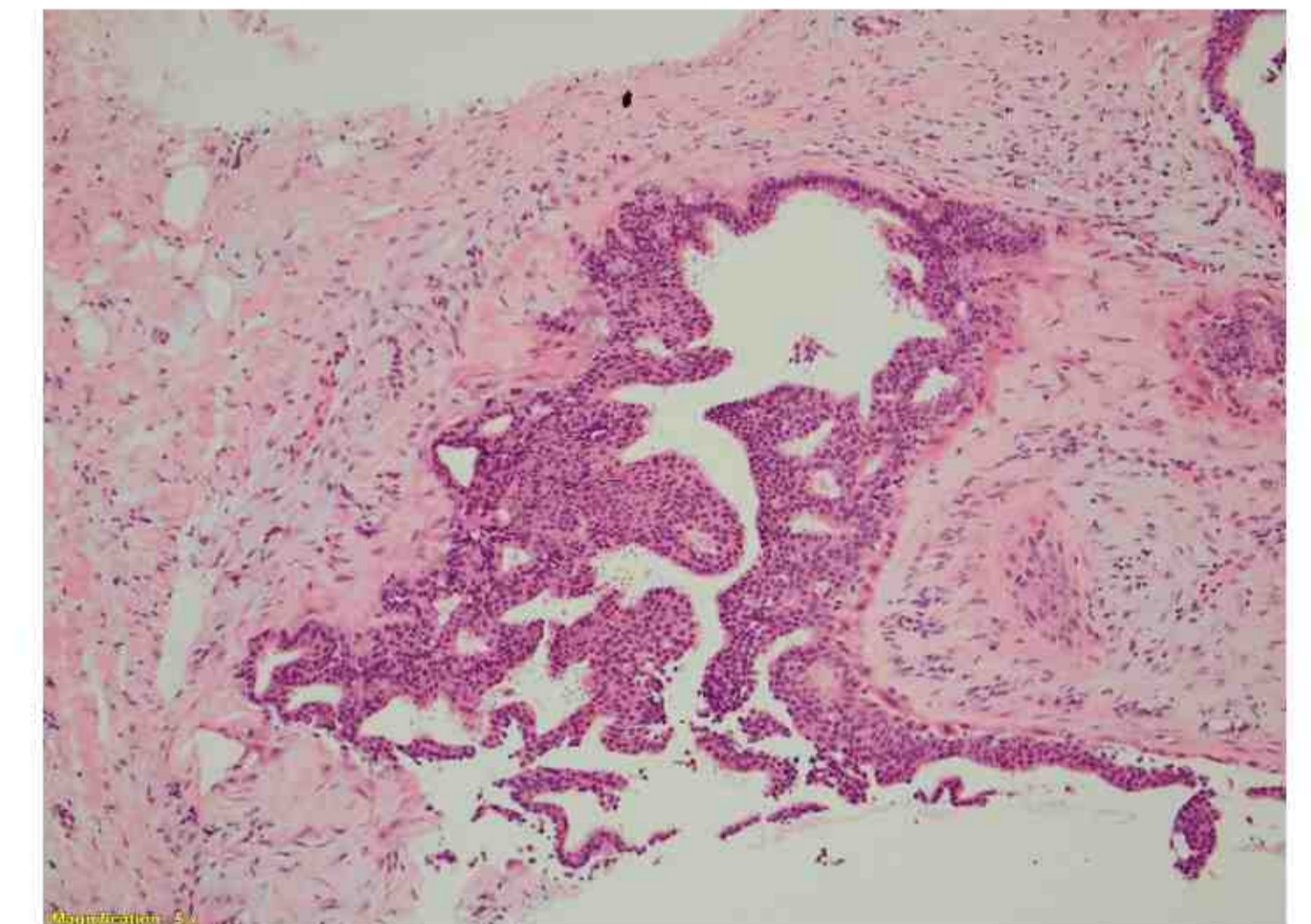
	Total	No further sampling	VAE	Surgery	Upgrade	Grade and number	Upgrade rate
<b>PL</b>	84	12	54	18	4		6%
<b>PL with atypia</b>	9	0	0	9	3	LG DCIS: 1 LG/IG DCIS: 2	33.3%
<b>PL no atypia</b>	75	12	54	9	1	LG DCIS: 1	1.6%
<b>RS/CSL</b>	55	4	46	5	4		8%
<b>RS/CSL with atypia</b>	4	0	3	1	1	LG DCIS: 1	25%
<b>RS/CSL no atypia</b>	51	4	43	4	3	LG DCIS:1 HG DCIS:1 G1 IDC: 1	6.3%

## CASE EXAMPLES

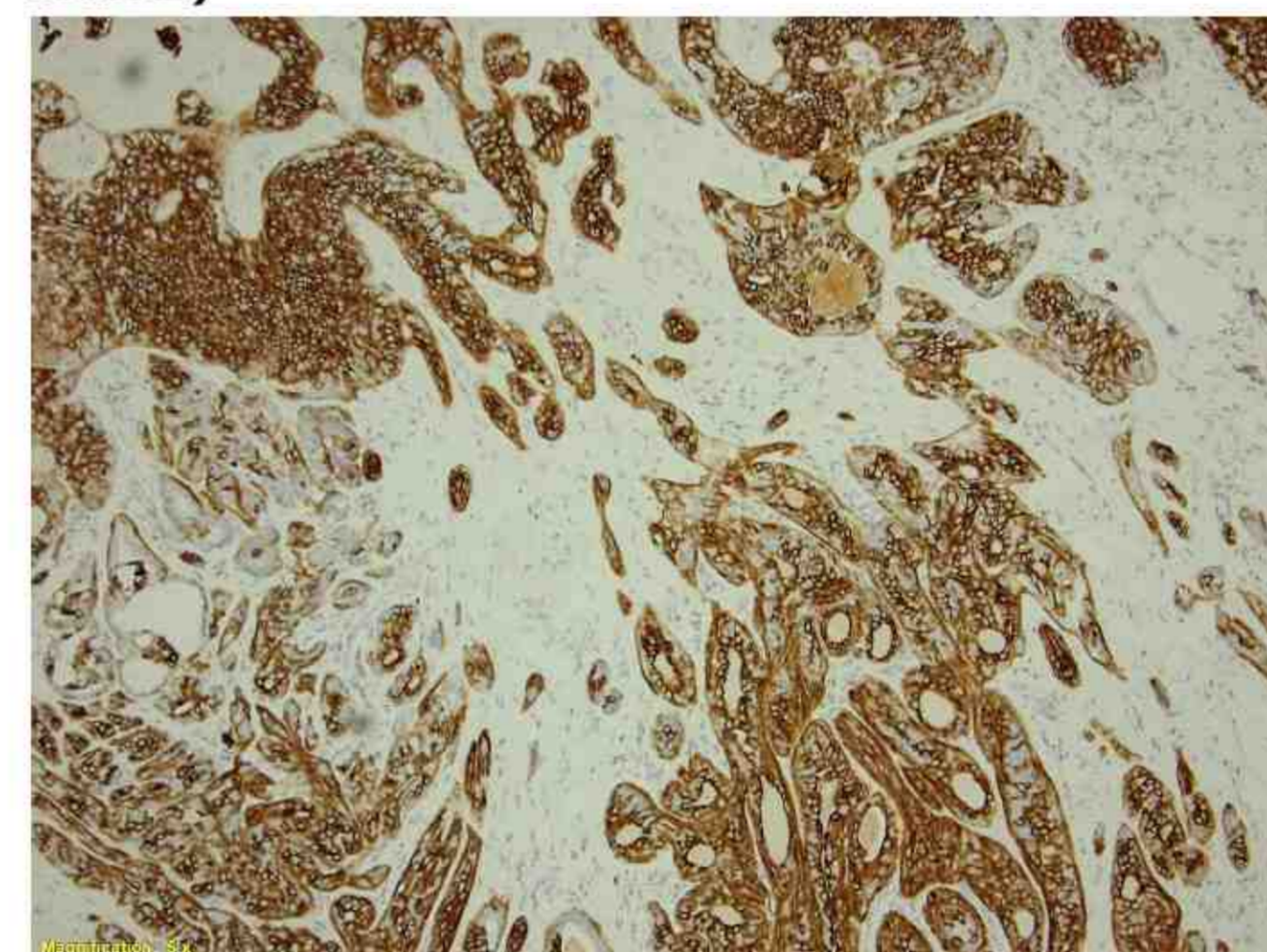
Papilloma with no atypia CK56 (shows positive cells)



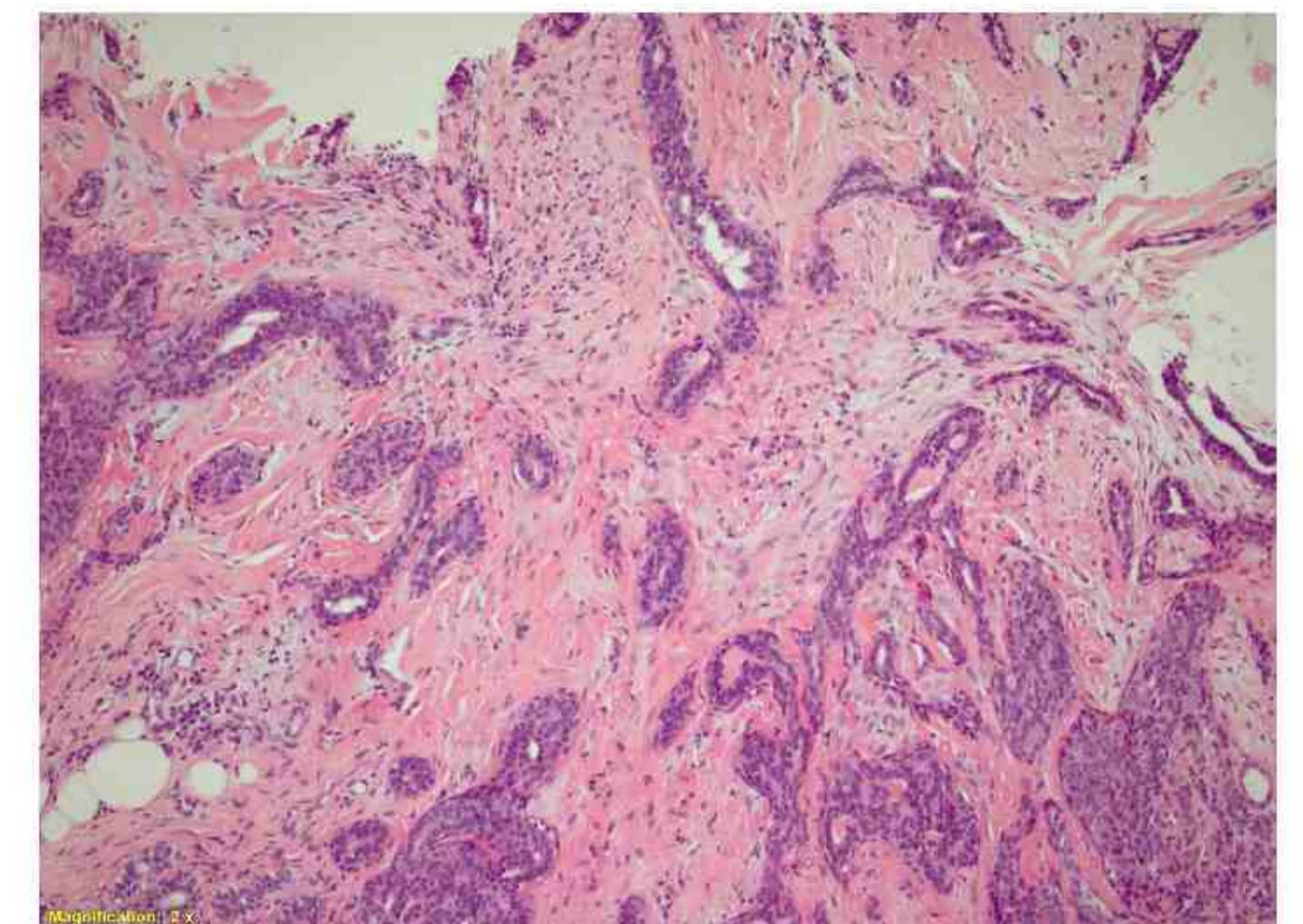
Papilloma with atypia



Radial scar no atypia CK56 (staining all ducts)



Radial scar no atypia



## DISCUSSION

The low upgrade rates RS/CSL and papillomas without atypia supports the new guidance replacing surgical excisions with image-guided VAE. Within our institution, guidance was well adhered to. Our upgrade rate for papillomas without atypia is lower than that quoted in the literature at 1.6%.

One RS/CSL without atypia underwent surgical excision following pathology advice at MDM discussion. Initial biopsy in this case was with 14 g core biopsy and the case was upgraded to HG DCIS following surgical excision. In such cases it may be worth considering a VAB to obtain a more accurate preoperative diagnosis.

Four RS/CSL, all without atypia, had no further sampling as they were small size, or found incidentally and completely excised.

One case of RS/CSL without atypia was upgraded to invasive malignancy. In this case only 6 cores had been taken at VAB as opposed to our standard departmental practice of 12 cores. This supports the need for thorough sampling.

## CONCLUSION

The new guidance has succeeded in significantly reducing the number of surgical procedures performed for benign disease. Our data shows very low upgrade rates for papillomas which may suggest that small papillomas without atypia on initial core biopsy do not require further sampling with VAE.

## REFERENCES

- NHS. NHS Breast Screening Programme. Clinical guidance for breast cancer screening assessment. (NHSBSP publication no. 49) (Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/465694/nhsbsp20.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/465694/nhsbsp20.pdf). 4th edn. ; 2016
- Pinder, S.E., Shaaban, A., Deb, R. et al. NHS breast screening multidisciplinary working group guidelines for the diagnosis and management of breast lesions of uncertain malignant potential on core biopsy (B3 lesions). Clin Radiol. 2018; 73: 682-692
- Batohi B, Fang C, Michell MJ, Morel J, Shah C, Wijesuriya S et al. An audit of mammographic screen detected lesions of uncertain malignant potential (B3) diagnosed on initial image guided needle biopsy: how has our practice changed over 10 years? Clin Rad 2019; online <https://doi.org/10.1016/j.crad.2019.04.006>