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Presentation title: Increased use of diagnostic testing after increased nuchal translucency: The influence of non-invasive prenatal testing and chromosomal microarray

Abstract: Objective: The utilization of non-invasive prenatal testing (NIPT) and chromosomal microarray (CMA) has significantly altered the options for testing following the diagnosis of an increased nuchal translucency (NT). This study defines the rates of utilization of diagnostic testing in the pre-NIPT, pre-CMA, and post-CMA eras. **Methods:** We retrospectively examined NT scans performed in our department from January 2010 to December 2020 and identified all NTs ≥3.0 mm for analysis. We divided our data into three distinct periods (2010–2012, 2013–2016, and 2017–2020) corresponding to our institutional practice shifts in recommending and offering use of NIPT (2013) and CMA (2016), respectively. **Results:** 689 patients with NT ≥ 3.0 mm met inclusion criteria in our study, of which 355 (51.5%) individuals underwent diagnostic testing and 334 (48.5%) did not. There was a significant decline in rates of diagnostic testing with NIPT (2013), *which has returned to pre-NIPT levels with the availability of microarray*. **Conclusions:** Since the routine use of CMA (2016), the rates of diagnostic testing for increased NT have returned to pre-NIPT levels. This study validates data suggesting an initial decline in the rates of diagnostic testing following abnormal NT but suggests that the decline may be reversing in the post-CMA era due to a rise in rates of chorionic villus sampling.