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Available online 2 July 2015

DOI of original article: <http://dx.doi.org/10.1016/j.mjafi.2015.06.008>

0377-1237/\$ – see front matter

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<http://dx.doi.org/10.1016/j.mjafi.2015.06.007>

Reply

Dear Editor,

We are extremely grateful to the reader for showing interest in our article and bringing out relevant observations.

Follow up MRI in the post intra uterine progesterone implant cases showed minimal change in the junctional zone thickness and no change in the uterine size. So it can be concluded that clinical follow up is cheaper, reliable and more sensitive modality in these patients, as also has been pointed out by the learned reader.

There was no change in the MRI findings in 4–6% of cases who did not respond to treatment. The evaluation modality of assessment of pain and menstrual blood loss was the only observation of these patients.

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Available online 7 July 2015

DOI of original article: <http://dx.doi.org/10.1016/j.mjafi.2015.06.007>

0377-1237/\$ – see front matter

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<http://dx.doi.org/10.1016/j.mjafi.2015.06.008>

Letter to the Editor

Human papillomavirus detection in genital samples by novel PGMY Primers

Dear Editor,

I read with interest the communication titled “Detection of human papillomavirus in women attending pap cervical screening camp at a peripheral hospital of North Eastern India” by Datta et al published in *Med J Armed Forces India* 2015; 71(2) 182–185.¹ I would like to add the following to the context.

The study highlights HPV and its oncogenic role in cervical cancer disease a well established association now, this being relevant as data from the AFMS which has a substantial population as vaccine candidates is not available. HPV 16/18 vaccines provide over 75% protection against invasive cervical cancer.² Regarding methodology the use of PGMY L1 consensus primers over MY09/MY11 primer pairs improves detection of HPV in genital samples.³ This suggestion may be useful to increase detection of HPV genotypes in cervical samples. Findings of HPV DNA positivity in almost 60% of inflammatory smears is a clear indicator of the importance of

regular follow-up and multiple rounds of screening to identify persistent HPV infections, this maybe expanded to include the immunosuppressed population, definitely a high risk subset.

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22 May 2015
Available online 6 July 2015

DOI of original article: <http://dx.doi.org/10.1016/j.mjafi.2015.06.018>

0377-1237/\$ – see front matter
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<http://dx.doi.org/10.1016/j.mjafi.2015.06.012>

Reply

Dear Editor,

We appreciate and acknowledge the concerns of the reader regarding the high prevalence of HPV DNA in the inflammatory smears¹ and we also believe that follow-up studies, including immune-suppressed subjects are essential in this population. However, due to the fleeting nature, longitudinal studies are very difficult to conduct in this population.

Regarding the reader's suggestion about methodology and use of primers in our original work,¹ we wish to explain our point from the perspective that our study was specifically aimed at assessing the prevalence of HPV high-risk (HR) types (16 & 18). These two HR types have been found to be virtually universal in their involvement in cervical cancers.² Considering the vast genetic diversity of HPV types, a number of consensus/degenerate primers (MY09/11, GP5/6, SPF1/2 etc.) targeted at the highly conserved L1 capsid gene region, capable of identifying and amplifying a variety of HPV types were developed.³ The MY09/11 primer pair, which we used in our study, is among the most widely used primers for HPV screening, worldwide.³ This system involves a pair of degenerate oligonucleotides, competent of sensitive amplification (1 viral copy per 100 host cells) of nearly 30 divergent HPV types, including the HR types 16 & 18.⁴ Hence the MY09/11 based PCR (MY-PCR) system remains an assay of choice for screening of samples, particularly for certain clinically relevant HPV types including 6, 11, 16, 18 etc.

On the other hand, the MY primers were redesigned to develop the PGMY primer system for improved amplification of additional HPV types.⁵ The PGMY primer system comprises a total of 18 oligonucleotides, targeting the same primer binding regions, as MY primers. However, owing to its improved capability to amplify diverse HPV types as compared to MY primers, the PGMY primer system is more suited for studies specifically aimed at discovery of new HPV types. Nevertheless, no statistically significant difference in the HPV DNA detection efficiency between these two primer systems has been registered in comparative studies.^{6,7}

In conclusion, the selection of primer systems for HPV studies should be based on the specific objectives of the study. In routine prevalence studies, where incidence of certain well recognized HPV types (6, 11, 16, 18, etc.) is concerned, the simple, sensitive and economical MY PCR based detection should be preferred for screening. In contrast, for studies aimed at discovery, the PGMY PCR system should be preferred for broad range amplification of uncharacterized or poorly characterized

HPV types. In our opinion, use of PGMY system (with 18 primers) instead of MY (2 primers) for routine HR HPV 16 & 18 prevalence studies will only increase the per sample screening cost, without any significant amendment in prevalence information.

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Available online 15 July 2015

DOI of original article: <http://dx.doi.org/10.1016/j.mjafi.2015.06.012>

0377-1237/\$ – see front matter
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<http://dx.doi.org/10.1016/j.mjafi.2015.06.018>