are identified following the culture of urethral material from men.

> K Shanmugaratnam R S Pattman

Dept of Genitourinary Medicine. Newcastle General Hospital. Newcastle upon Tyne, NE4 6BE, UK

References

- 1 Cartwright KAV. Meningococcal meningitis. Br J Hosp Med 1987;38:516-24.
- 2 Evans BA, Bond RA, Macrae KD. Sexual behaviour in women attending a genitourinary medicine clinic. Genitourin Med 1988: 64:43-8.

Avre v Avlesbury cervical spatulas

Sir.

Our experience with the use of the Ayre and Aylesbury spatulas for taking cervical smears from women attending a genitourinary medicine clinic is similar to that of Dr Goorney and colleagues.1 Cervical smears obtained with Ayre spatula from 406 women who attended the department of genitourinary medicine in Newcastle during the first quarter were compared with those obtained with Aylesbury spatula from 566 women who attended during the second quarter of this year. Women who had smears taken as follow up to previous abnormal smears were not included in this analysis. If a woman had more than one smear taken during the six month study period only the first smear was included. Both groups were similar in age with mean ages of 25.1 and 25 years. The incidence of sexually transmitted diseases diagnosed during the same quarter as the smear did not differ significantly

the detection of endocervical cells and that of abnormalities needs to be interpreted with caution as endocervical cells may not after all be the right indicator of adequacy of sampling.23 Perhaps the quality of smears (and the efficacy of spatulas) should be assessed using multiple criteria so that the better sampling method can be found.

Departments of Genitourinary Medicine.* and Cytopathology† Newcastle General Hospital, Westgate Road. Newcastle upon Tyne, Tyne and Wear NE4 6BE, UK

References

- 1 Goorney BP, Lacey CJN, Sutton J. Ayre v Aylesbury cervical spatulas. Genitourin Med 1989;65:161-2.
- 2 Kivlahan C, Ingram E. Papanicolaou smears without endocervical cells. Are they in-

between the two groups. Endocervical cells were found significantly more often with the Aylesbury spatula than with the Ayre spatula, especially if the smear was normal (table). There was no significant difference between the proportions of epithelial abnormalities with or without endocervical cells diagnosed with the two spatulas. Altogether 82 (20.2%) of smears obtained with the Ayre spatula and 91 (16.4%) of smears obtained with Aylesbury spatula had epithelial abnormalities (p > 0.1). Unlike Dr Goorney and colleagues we did not see a significant difference between the proportions of unsatisfactory smears in the two groups. The apparent lack of association between

> K Shanmurgaratnam* K Sankar* V Wadehra†

Comparison of 962 women whose smears were taken with Ayre or Aylesbury spatulas (figures refer to numbers (percentages) of women with the given finding)

| | Ayre $(n = 406)$ $(mean age = 25.1)$ | Aylesbury $(n = 556)$ $(mean age = 25.0)$ | Difference |
|--|--------------------------------------|---|------------|
| Normal smear | 311 (76·6) | 451 (81-1) | NS |
| with endocervical cells | 130 ` | 247` | p < 0.001 |
| Non dyskaryotic epithelial abnormality | 65 (16·1) | 71 (12·8) | NS |
| with endocervical cells | 28` | 34` ´ | NS |
| Dyskaryotic smear | 17 (4·1) | 20 (3.6) | NS |
| with endocervical cells | 5 ` ´ | 12 ` | NSt |
| Unsatisfactory smear | 13 (3.2) | 14 (2.5) | NS. |
| Total | 406` ´ | 556 `´ | |
| Smear with endocervical cells | 163 (40-1) | 293 (52·7) | p < 0.001 |
| Lower genital tract infection/s† | 214 (53.7) | 323 (58·1) | NS |
| Lower genital tract infection/s—Group A* | 134 (33) | 205 (36·9) | NS |

^{*}One or more of syphilis, gonorrhoea, chalmydial infections, genital herpes, condyloma accuminata and trichomoniasis.

- adequate? Acta Cytol (Baltimore) 1986;30: 258-60.
- 3 Woodman CBJ, Williams D, Yates M, et al. Indications of effective cytological sampling of the uterine cervix. Lancet 1989:ii:88-90.

Allergic reactions to rubber condoms

Allergic reactions to condoms are infrequently reported in the literature. Antioxidants and other rubber chemicals are potential allergens and an attempt has been made to make "hypoallergenic" condoms by washing out rubber additives. In a recent paper in Genitourinary Medicine. Rademaker and Forsyth stated that rubber latex itself rarely gives rise to allergic problems. In contrast to this view, we have shown that allergy to latex is rather common among people using surgical or household rubber gloves and that condoms may also cause symptoms due to allergy.23 The frequency of latex allergy among glove-using hospital employees is as high as 3% in Finland and increasing awareness has revealed this allergy in many other countries.4 The allergen is latex protein derived from the rubber tree and existing in manufactured products such as gloves, condoms and balloons. The symptoms include local urticarial reactions but also systemic symptoms such as asthma. Moreover, allergic patients have exhibited anaphylactic reactions during delivery or vaginal examination from the latex gloves worn by doctors and nurses.5

The manufacturing process is similar for both condoms and surgical latex gloves. Therefore, condoms also seem to be a potential source of latex allergy. We recently described seven (six females, one male) patients allergic to latex who had experienced local symptoms from contact with condoms during or immediately after intercourse.3 An anaphylactic reaction from condom usage was recently reported by Taylor et al showing also that condom allergy can be life-threatening.6 We examined 16 different condom brands and found great differences in their allergenity.3 Three of the most allergenic brands originated from the same manufacturer suggesting that the amount of latex protein persisting in condoms is dependent on the manufacturing process.

The immediate latex allergy from gloves and condoms is a newly described phenomenon which may easily escape clinical diagnosis. Atopic people are prone to this IgE-mediated allergy which can be verified by prick testing or latex RAST (Pharmacia Diagnostics, Uppsala, Sweden).³⁷ Simultaneous delayed allergy to rubber chemicals is

[‡]Fisher's exact probability value = 0.124.

[†]Includes Group A.