After fixation for 3 days (in which time the solution was replaced once), the animal was decalcified in a continuously stirred 5% HNO_3 solution until the total body was soft. Decolourization was performed in 3% H_2O_2 (if necessary 5%) till the skin was completely colourless. In the pyloric caeca and the gonads some colour was left, probably due to lipid components. Formaldehyde and acid residues were washed out by running tap-water for 3 days and then by putting the animal 3 times in aqua dest for 2 days. Then the preparation was dehydrated by bathing it in 50, 70, 90, 96, 100 and 100% ethanol for 12 h in each concentration.

Now the animal was placed for 2 days in benzene, which was replaced 3 times, after which the preparation was placed in a mixture of methylsalicylate and benzylbenzoate (15:5.5, v/v). This liquid shows the same refraction index as that of the tissues of the animal. To facilitate the removal of benzene and air bubbles, the tips of the arms were removed and the preparation was placed in a vacuum desiccator.

The result is a transparent starfish with a blue haemal system and slightly coloured pyloric caeca and gonads (figure 2). The picture clearly shows the connection between the axial complex and the gonads. The fact that the gonads are coloured, whereas the digestive system is not, shows that the trypan blue has gone in the direction of the gonads. This transport direction has already been suggested by Cuénot[7]. Research on the interconnection between digestive system and axial complex is in progress.

1 The authors are much indebted to Dr P.A. Voogt and to Dr R.C.H.M. Oudejans for reading critically the manuscript.
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A method to collect cervical smears from small breeds of monkeys

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Summary. A simple method is described to collect cervical smears and to have a clear view of cervix for small breed of monkeys. This method was found useful to collect adequate cytology smears with good preservation of cellular morphology.

There is an increase in the use of primate models for various physiological and pharmacological investigations. In studies in reproduction, cytological examination of cervical mucosa is regularly used for studying different phases of menstrual cycle, for detection of ovulation, for breeding and for research purposes, for screening cervical malignancy during studies with or without contraceptives, etc. The usual way of collecting the smears is by the introduction of a sterile cotton swab through the vagina[1] or by examining the vaginal washings[2]. The disadvantages of these procedures are that a) no information is obtained regarding the origin of cells, b) increase in the number of inadequate smears with lack of cellular material and more of mucus, c) cellular contamination from vulva and vagina, d) fecal contamination. The following simple method has been found to be useful in overcoming the above disadvantages and has been found practicable in our primate colony especially for smaller sized bonnet (*Macaca radiata*) females.

Method. An attempt was made to use the small size Simm's and Cusco's bivalve speculum which was found to be useful only for bigger animals like adult langur monkeys. For smaller bonnet monkeys, this could not be used. The procedure used for collection of cervical smears from the bonnet monkeys is discussed below. The perineal and the external genitalia were cleaned with antiseptic lotions and a sterile nasal speculum of 35 mm (figure 1) was introduced into the vagina. The bivalve speculum which opens sideways was opened after insertion into the vagina and a light source from above was provided to have a clear view of the cervix (figure 2). The cervix could be clearly seen and cervical scrape smears and vaginal pool smears were taken

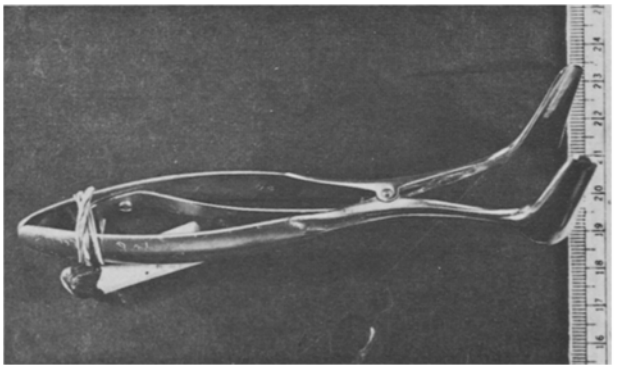

Fig. 1. Nasal speculum, 35 mm.

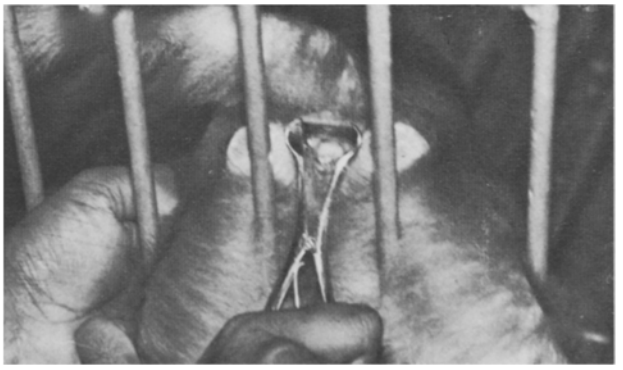

Fig. 2. Speculum in situ, exposing the cervix clearly.

with a sterile cotton swab. The smears were immediately spread on prelabeled clean slides and fixed immediately in ether-alcohol mixture. The material thus obtained proved adequate with a good number of well preserved squamous cells.

This method provides a direct viewing of the cervix and enabled us to collect the smear from the required site without contamination. The adequate exposure of the os can also be used in investigations associated with insertions of intrauterine devices and other uterine manipulations.

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