DISCUSSION ON VASECTOMY

A symposium was arranged during the Celebration week of H.M the King's birthda by the Scientific and Research Subcommittee of NMA on 10th June 1969 in the Auditoriu of the Bir Hospital Kathmandu. The topic was "Social and Medical Aspects of Famil Planning in Nepal" and the Hon'ble Minister of Health and Foreign Affairs, Mr. Gehendr Bahadur Rajbhandari, inaugurated the symposium. Social workers and representative from women's Organisation, Planning and Family Planning Experts, Obstetrician–Gynaecologists, Paediatricians and Surgeons took part. Below we are reporting the discusio on vasectomy which took place in the afternoon session. This discussion was preceded by a paper, reviewing the whole subject of vasectomy, read by Dr. A. Hai–Khan FRCS (Edin) FRCS (Ire.) which will be published in the October issue of JNMA. The other papers of this symposium as well as those read at the symposium on Family Planning during the 4th All Nepal Medical Conference at Birgunj in Feb. this year will be reported also in the coming issues of our Journal.

A .K. Sharma FRCS (Edin)

Friends, you have heard a lot about the procedures of vasectomy from Dr. Hai Khan. He has given a very illuminating lecture,

Family planning was known to the world since the beginning. They had to plan their family due to scarcity of food which holds true to this date. Money problems which excessively worry the parents can be transmitted to the children and can cause retardation in their mental status. One should plan to have as many children as one can afford to support educate and get sterilised. This is high time that we parents shoulder the responsibility of children instead of putting them on the Almighty.

There are many methods of family planning but there are many difficulties with the general methods so surgical procedure being the safest and best should be the method of family planning. It must be clear that vasectomy is a permanent procedure and results of re–anastomosis can not be guaranteed at the beginning. There are questions about when to do vasectomy. Today it is a good place where we could make a rule and establish criteria for advising vasectomy. The advice should be based on (1) The number of children (2) Income of the person (3) age. (3) his mental state and (5) age of the children because infant mortality is quite high in our country. So during our discussion today we can make criteria and submit our report to the Family Planning Association and the Body.

Now while the reduction in birth rate is beneficial, induced abortion, for a particular state of health of the mother, under good medical care, is quite safe. Our law allows in-

duced abortion only when saving maternal life is essential. In the absence of law a woman who wants to end her pregnancy must turn to indigenous sources for help hence I request the Family Planning Body and the Association, Hon'ble Mrs. Kamal Shah and the other lady, Vice Chairman of the National Panchayat:–they are the people I wanted to request; they are the persons who should take the matter over to the Judiciary and try to legalise abortions so that many lives could be saved.

You know there are many surgical methods of controlling the birth rate like vasectomy tube ligation and abortion but I am sorry to note that nobody in the preceding talks discussed re–anstomosis or the vas, salphingostomy and salphingoplasty. These are often the methods by which we plan the family (and the topic today is family planning). There are mothers who do not have children and are very intent on having children and nobody spoke about helping these mothers to have children.

Vasectomy is the most popular method of reducing birth rate and has become most popular in out country because people come to family planning centres by themselves with minimum incentives. Now something about progress with vasectomy i.e. side effects and failed vasectomy. By failed vasectomy I mean there are spermatozoa in the semen after safe period, that means 3–6 months after operation (3 months I will say) or 10 ejaculations. There are very few cases who have come with true recanalisation after vasectomy— I had to re–operate on two cases who had spermatozoa in the semen after vasectomy by me. Ligation of the wrong structure is done by some of our compounders. I have not come across an accessory vas. Help by a neighbour may cause failure of vasectomy Then there are people who come with psychological problems, because of wrong motivation–they are very well and in sound health but they say they cannot enjoy intercourse so I think the impotence is just psychological. But there is one case in my record of a patient with infection of wound followed by atrophy of the testis. This case was operated by one of the compounders. The testicular artery must have been tied; there was massive infection of the scrotum. I evacuated the pus next time and while doing so found that the testis was completely gangrenous and I had to remove the testis.

We have started reunion of vas since the last 5 years and we have done 44 cases. The indications are; loss of children specially the son; Re–reunion i.e. marriage, it may be even a 4th or 5th marriage; accidental vasectomy during operation for hydrocoele, hernia and filarial scrotum; injury to the artery of vas. Psychological change after vasectomy is an indication for reunion e.g. one case from Barabise where vasectomy was done in a camp, and after reunion he is happy.

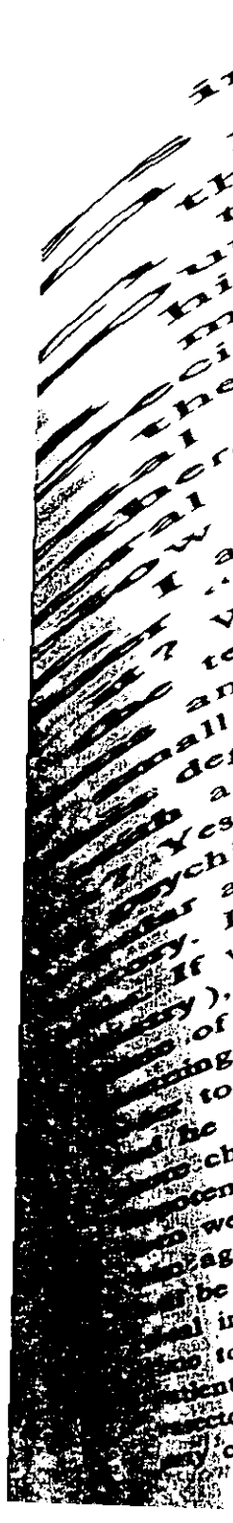
Wrong motivation like the temporary vasectomy pointed out by Dr Adiga is indication for reunion of vas. Three cases came to me after being taken to vasectomy camps in Bombay by touts, where they were assured that the vasectomy was for 5 years only. After 5 years when they could not get children, they came to me and had reunion of vas.

Technique of reunion of vas has been well stated by Dr Hai–Khan. Personally, if it can be proved that the two ends of vas have patent lumen, renastomosis will be 100%

successful. To know whether the two end of vas have patent lumen is easy. After dissectio of the two ends, I start cutting with a knife. If there is flow of white fluid from the tes cular end of vas, it means that the testicular end of vas has a patent lumen. I take th little fluid on a slide and examine under a microscope. I have not done it in all cases bu I think it should be done in all cases. Now if spermatozoa are seen in that little fluid, am certain the operation is going to be successful. I am saying this from my persona experience of a case of primary sterility where I tried to re-join the vas. I went on cuttin 2 or 3 cm of vas but I could not find fluid. To this patient I said "I am sorry, I can tel you now, it won't be successful." But once I get the fluid, I put in on a slide to be exami ned. I take 2/0 chromic catgut atraumatic for splint. In most of the cases the results ar gratifying. In all the cases where the lumen is patent the results are good—they star spermatozea in the semen. In conclusion I want to say that we cannot be optimistic abou the resalts of reanastomosis. Dr Hai-Khan said that Phadke has quoted 63% successfu results. I cannot quote 100% right now but if the lumen of vas is patent, I can say result is prety good. But to the person coming for vasectomy we should say that the procedure is a permanent one and not temporary.

Dr Moin Shah FRCS (Eng) FRCS (Glasg) FRCS (Edin)

From the number of speakers we have supporting the operation of vasectomy I am beginning to think that it is becoming a popular operation with us but is it the most popular method of family planning in Nepal at present? Perhaps it should be but certainly it will not take the place of being the most popular method at present and needs much more publicity. What are the draw-backs? I think I will speak on only a few points today. Vasectomy is of cource a very simple operation, can be performed in ten minutes. I should re-emphasize my question in the seminar arranged by the Family Planning and MCH Project. The point I was trying to make at that time was that we may not be sufficiently explaining to the patients the implications of the operation. This is a very important aspect of vasectomy to my mind. Take the psychological aspect of vasectomy which Dr. Tenhave wanted us to discuss in that seminar. We did not take up the suggestion at that time. Dr Tenhave informed me this morning that Dr. David Wolfe from London is interested in studying the psychological aspects of vasectomy in Nepal. We should, I feel, welcome him. This is an important problem because those patients who have a psychological upset after vasectomy have it because they have not been explaind very well the implications of the operation and we have not assessed the mental state of the patient before advising the operation. Therefore they might "Change their mind" after operation. The patient might not have given sufficient thought to this method of family planning, he might not have discussed it very well with the paramedical personnel and surgeons and he might have heard in the village that this method of family planning could make him impotent. What happens after the operation when a sort of psychological storm was going on in his mind during the operation.? When he goes back to the village somebody may ask "Did you have both sides done?" "Yes" says our patient. "Oh: you should have it done only on one side, you see. If you have both sides done then



impotent" says the wise guy. "Yes" nods another friend, "By having it done you have now lost your manhood". Someone else adds "Timi lai ta Khasi have been castrated.) At home his dear wife is naturally worried—most wives that after operation the husband may not be potent anymore. I had to make to one vasectomised patient by allowing him to relax himself the day the stit- but, because this wife wanted him to prove that he had not lost his potency his operation. So apart from the poor husband's own worries about this opera- males are concernad about the testes and would be worried about an operation cially if it is meant to sterilise-the-man has pressure from his wife and has to con- the general belief in the village. The fear of castration associated with vasectomy is and not peeuliar to Nepal. Even in U.S.A. and Europe this fear is there ere is not enough publicity and information that vasectomy is not castration. al people associate vasectomy in man with the castration of he-goats and w if the patient has not been explained to, if sufficient time has not been spent I am not surprised that he gets psychologically upset. Who would not?. And then changes his mind" after the operation or becomes impotent. What do we do Well if the impotency is because of injury to both testicular arteries, then either testes would be found to be small and atrophied or both may have become gan- and removed or one may have been removed and the other will be atrophied and all. I think it is most unlikely in any competent hands that the damage will occur degree. So in most cases, if not all, impotency is psychological; it has nothing to any organic pathology. How do we treat such a case?. Assurance and explana- Yes, though they are still better given before the operation. You may send him to chiatrist if you like and psychiatrists should study this problem. Or, one of the r and profitable alternatives is to reunite the vas—this I think is completely unsatis- y. I repeat: it is completely unsatisfactory to reunite the vas for psychological rea- If we do want to cut him we might as well make a cut in the skin (surgical psy- y), tell the patient his vas has been reunited and get him psychologically cured. The of re-uniting (for psychological reasons) a vas which was recently cut for family ning, obviously defeats the objective of family planning so that we have cut the vas in to reunite it. It is like saying that the patient was not adequately explained to before be cannot have psychiatric treatment now so although he did not want or need any children, we better undo what we have done and get him cured of this psychological ency due to ignorance, rumours and pressures and let him plan larger families. And we cannot very well undo what we have done so if we cannot help operating on again, we might as well just cut into the skin, stitch it up and reassure him since it be the reassurance and not the reanastomosis that will produce an instant psycholo- improvement. This is one aspect of vasectomy to which we should devote much more to prevent it developing. Any unduly nervous patient with unstable personality, any nt who has not thoroughly understood the problems involved, should not be advised tomy. So also any patient who is not going to take precautions during the unsafe period create social and legal problems, as I said in the Seminar last time. If he has not un-

derstood that he will not be sterile immediately after vasectomy, he may blame his wife the doctor. Hence the necessity for examining the semen. This will also give us idea abo how many ejaculations clear up the spermatozoa from semen in our Nepalese patients what percentage of cases (we do not kuow this at present). So vasectomy is a simple ope tion provided we have done the homework. Now regarding failed vasectomy, may I qu tion a few popular notions? First about administering testosterone as a routine after rean stomosing a vas. Now if success depends on demonstration of sperms in the fluid from th testicular end of vas, why should the patient have testosterone? Does testosterone he psychological impotency of reunion of the vas? After vasectomy we are told that the pr cess of spermatogenesis lies dormant. The sperm-forming cells are there but due to th back load of pent-up sperms, the cells tend to lie dormant. With successful reanastomos spermatoginesis will restart in a full swing. And if there is demonstration of sperms in th fluid from the testicular end, it shows that the sperm producing cells have not disappeare anyway. Secondly, how often is an accessory vas a genuine cause of failed vasectomy There may be a tendency in the human mind to blame an accessory vas for any faile vasectomy. So we should be very careful not to swell the number of accessory vas in worl literature without actually being able to demonstrate two vas, proved histologically. Third about spontaneous recanalisation of vas after vasectomy, causing failure. We generally u chromic catgut for tying the vas after division (Dr Hai-Khan suggested No 1 Chrom catgut). It probably gets absorbed in about 3 weeks time and if the crushed end of th divided vas develops a lumen again and the lumen of one cut end meets the lumen of anoth and the gap is epithelialised, you have a recanalised vas causing failure. So recanalisatio will not be because of the knots, because the knot of chromic catgut gets absorbed anywa Hence the passage has not formed **through** a knot that has disappeared anyway but rath because of the disappearance of the knot and disappearance of the obliteration of th passage that the knot had produced. Also recanalisation cannot be blamed on infection the cut ends because I should think the infection would be more likely to encourage fibrosis and occlude the lumen than encourage patency of lumen and bridging of the gap. We can not diagnose recanalisation as the cause of failure of vasectomy until we find a continuous vas in a case where the same vas had been definitely cut. This point is worth studying because a rather high percentage of spontaneous recanalisation has been quoted in some American papers I have had the pleasure of reading e.g. 7% in one paper. Now if the ligated ends of the vas are brought close together in vasectomy in order to make reanas tomosis easier (this is not my practice of course) would we not be encouraging sponta neous recanalisation and therefore failure of vasectomy? Excising 3/4 or 1 inch of vas, a Dr Hai-Khan suggested in his paper, is meant to prevent spontaneous recanalisation. So i will not be good practice if anyone were to bring the cut end together after excising thi one inch.

Dr. D. N. Gongal MS. (Bombay)

Mr. Chairman, ladies and gentlemen, I do not think anything is left to be talked abou the vas and at the same time its re-anastomosis, the doing and at once the undoing. I would

just review the British literature of recent years about vasectomy. I congratulate the Family Planning Association and the Family Planning and MCH Project on making vasectomy so popular in Nepal, whereas in Britain it has not yet been popular, unlike sterilization of women which is more popular there. In India 4 lacs of people have been vasectomised in 2 years and 45000 are vasectomised in U.S.A. every year. Now vasectomy has become a definitely accepted method of limiting birthrate. The Simon Population Trust in Britain advocates vasectomy as being a safe and simple procedure. It has not yet been popular there because of fear of impotence and castration, as the previous speakers have mentioned and the other factor is permanence itself. But vasectomy can be advocated. There is no impotency because of division of vas per se. In a New York study 55 out of 73 were very much more satisfied after vasectomy and 60 wives out of 73 had much more happy and satisfactory marital life after their husbands had vasectomy.

Certainly vasectomy is a very minor operation but it is at the same time very important and has to be done very carefully. Dr. H.G. Hanley, Genito Urinary Surgeon in London treats it as a major operation. He does them under G.A., because indentification of vas has to be very definite and secondly, the patient should have good rest after operation so that there is no haematoma and the patient does not publicise against the operation.

There were cases of failure and the cause were a) if the vas was simply divided and after ligature the two cut ends were left close to each other in alignment. Dr. Shah has pointed out just now the fallacy of bringing the cut ends close together b) rarely a double vas—well, lot of doubt exists about presence of a double vas.

He exises a length of vas, curls up the the cut ends and ties them so that the two cut ends remain far apart and do not come in apposition and alignment at all, or he overlaps the cut ends.

So-called "failure of vasectomy" is when the wife becomes pregnant in the safe period which in an average is after 3 months but spermatozoa have been present in semen 17 weeks after vasectomy. They calculate not in weeks now but in ejaculations. The average is 8 ejaculations to get rid of the sperms. That has to be explained to the family so that a rift may not occur later. When the wife does become pregnant, I feel personally that even if the vasectomy has been done successfully it is better for us to take blame of this "failure of vasectomy," (instead of blaming the girl) and explore the case-"second time vasectomy"-then explain to the girl to be careful in future. There are many instances of such failures in Bombay: one surgeon who gets histopathological examination of the piece of vas removed and gets the sperm count done, still gets such cases of "failure of vasectomy" sometimes and bluntly tells the patient "I did the vasectomy on you, not on your friends and neighbours."

About reanastomosis, which Dr Hai Khan, Dr Shah and very optimistically Dr. A.K. Sharma have mentioned, the success rate in world literature is 61%. Personally I have a short series of three cases. One came afterwards and said that his two wives had both become pregnant and I was not going to go into the details. The surgeon in Bombay mentioned above, with whom I worked, was very good in cases of primary sterility. In the

histopathology of testis if sperms were present, he used to do vaso-epididymostomy then quitely tell us " Now you may go and tell his wife that he has been operated she may bear the child—but at the same time tell his neighbours and friends also the sa thing". The success of reanastomosis is presence of spermatozoa in the semen exami not pregnancies. Of course even presence of spermatozoa does not guarantee pregnan Secondly, if the lumen patency is demonstrated only in one of the two cut ends, re-ca isation does not necessarily follow. Thirdly, I take great care not to cut the artery to vas. This artery should be saved even if it takes a long time. I am sure my collea also do the same.

About the Family Planning and MCH Project and the Family Planning Associati where we work, we have been doing vasectomy just to fulfil the target of numbers, with knowing whether the cases became sperm free or not. I don't think any person has b called back for the sperms test. So we do not have any follow up results either about family relations or about the presence of spermatozoa in semen. There must be facili for follow up if we do not want legal complications later, if not today. Secondly, we ha not been able to take family planning to the people who need it most — people in lowest economic and social group. You may walk through the corridors of a major cen for health such as Bir Hospital and see mothers sweeping and cleaning the floors with baby in the back, a child in one arm and a bucket in the remaining hand. These are t people to whom the national compaign of family planning should reach. Thirdly, we ha concentrated the health campaigns in the easily accessible Terai such as Malaria eradicatio family planning etc. and almost ignored the hill people where the need for certain heal campaigns may be greater but due to difficulty of terrain etc. they are not popular. T Terai gets medical attention in an intensified manner. I would not say we should concentra on one region and not the other. Fourthly, recently I went to Bharatpur. I did all t vasectomies on Kalo(Black) Poudayls, Seto (White) Poudyals, Dhungyals and only such peopl I do not know what the experience of Dr Ram Man Shrestha MBBS was when he recen went for a vasectomy Camp in Janakpur. I should like to know. So the motivation has be done in the Terai not only in our national language Nepali but also in the loc language in order to achieve greater success.

Dr. J.R. Pandey FRCS (Ed)

This is my turn to say a few words on vasectomy. My predecessors have said muc about vasectomy, its need in Nepal and the procedure of reanastomosis. I have very lit to add. First of all I reiterate the fact that this is indeed a very simple operative procedu and has been quite popular in Nepal—I would not say this has been the most popul method because from the number of vasectomies we had so far, we are far from the targ which we should achieve. As far as the popularity goes I think the condom still takes t first position among the various cantraceptives used in Nepal. The other thing is that vase tomy is not the final answer though it is the best procedure with 100% guarantee of sterilit But it is not the final answer in a country like ours where infant mortality is quite hig and specially in remote camps, after vasectomy is done, there is no well planned regime

Discussion

look after the health of these people. Though vasectomy was taken up as the most popular method I am not happy to show that we should run after it as the Final Answer. Perhaps as we educate more people things will be more suitable. But I think, later on, our focus should be more on the pill than on the vasectomy.

The question of fixation of criteria for people who subject themselves to vasectomy is very important both from the surgeons' point of view and also of the person having the operation because this is the way in which we can put in clear perspective and explain to the patient that his position is such and such. If we had no alternative method of contraception then of course we could accept anybody who came for vasectomy. This I am saying from personal experience in my work in the FPA. In the beginning, rather casually I used to think I should just help them all. Later as the plans developed and I went deep into their problems I found that many youngsters of 19 and 20 years were coming for vasectomy which made me feel morally rather upset. What is going to be the likely complication later on when we vasectomise a patient in the prime of youth when his fertility is very high. He may have 2–3 children because of early marriage. If in trouble, he could choose some other method: he could bring his wife and have her to have pills or a loop or he may use condoms for a few years till he reaches an age past 25 years, preferably 30 years, then have vasectomy. I have had a person come for vasectomy without even being married. This was difficult because he said that nothing had been mentioned over the radio or in the papers that he should not have the vasectomy. He could not afford to look after children. He was studying and he did not know how far he would go on studying. I had trouble because it is difficult for a surgeon who is busy in doing hospital work and also in helping out Family Planning and MCH Project and Family Planning Association to sit down and explain to patients time and again. If there are fixed criteria, we should be able to tell the people at the time of motivation about the criteria, then they could choose accordingly.

Now the question of technique. I have nothing to elaborate—this is very simple. I used to use catgut but lately I have changed completly to linen thread for tying the cut ends of the vas. This I have done not because of results of failed vasectomy due to catgut but because I have realised that use of thread guarantees certaintly of vasectomy. As Dr Moin Shah pointed out, catgut gets absorbed in about 3 weeks time and we cannot be sure that recanalisation after absorption of catgut will not take place if the two ends are approximated together after division and ligation with catgut. So I use linen thread as a routine now. The other thing I have noticed after following up a few cases is that most of these complained of losing weight in the region of scrotum. It is an anatomical fact that the vas being a tough tissue is support of the testis as well. Quite a few people complained of this to me; they felt a sense of weightlessness in the region of scrotum. I do not know if any one has made such complaints to my colleagues also. Now I make a routine of tying the thread ligating the distal end of vas into one of the surrounding tissues, thus anchoring it. It helps them perhaps psychologically.

To explain to the patient is very important. I will again reiterate the fact which Dr Moin Shah pointed out that the homework is much more important (takes a massive effort

but is well paid) than just doing a vasectomy operation. I noticed in remote camps there was a tremendous response from people e g. when we were leaving Baglung aft days there were still many cases left for the operation. I wondered whether they rea what vasectomy was. Perhaps they came for a medicine which could prevent them f having anymore children. It will be morally right if we take certain steps like sendi motivator before sending the actual operating team, to tell these people and the Pancha and distribute leaflets etc. These persons should be in clear cognizance of what they going to have otherwise this would be moral deception, even though we reach the goal population control. I found that the best way to motivate was to get the Jilla Panch Sabhapati or the Pradhan Panch vasectomised first. He becomes the greatest motivating f and is bound to get a few colleagues just to save himself from mockery and any understandings others may have about this operation. (I am telling this now to a gathe mainly of doctors but it is through the doctors that we clarify the misunderstandings people).

A few people complain that they became fat or became thin after operation. We not know why but we can't just say we have done the vasectomy, now get out. We m tell them what we believe. When they are fat I say "You are happy because you wo have to look after an extra sized family". When thin, they may have some other illness wh may be projected to the operation he had. These complaints must not be laughed at b should be taken into consideration by doctors during follow up and explained.

Coming to Reanastomosis, I don't think an emphasis on this is very much needed this juncture because I personally believe that the only justification for reansstomosis is t total demise of children after vasectomy. No other indications whatsoever should be con dered for reanastomosis–no psychological reason, no reason that the chap got married aga and wants to have children from other wife. Because you see we have done vasecto simply for population control and if we have any sense of the national problem of popul tion control which is facing us, we cannot make any concession regarding this. If the cha had death of all his children in a plane accident or a landslide etc. then naturally it is bi ding on us to reanastomose his vas. If we say that the chap has psychological upset a needs reanalisation, then we have failed in the first step, the home work as Dr Moin Sha pointed out. We did not explain to him properly that psychological upset had nothing to d really with vasetomy. Castration complex and these things must be explained to at t outset. That is my vindicated belief.

Failed vasectomy is a problem in a minor way but there are cases of so called "faile vasectomy" i.e. wife getting pregnant after the husband had vasectomy. This could be failed operation or some other social problem. It is a failed operation when the man passing spermatozoa 6 months after operation. Then we must advise immediate re–vase tomy. If the semen did not show spermatoza and the wife has been pregnant anyway, wh should we do? Some of my colleagues want that legalised abortion must be considered. Yo must have seen that the term abortion is conspicuously absent from the symposium. W did not want to exclude a discussion on it really but we thought more deliberations tha

just casually mentioning abortion here and there in a discussion on family planning, is needed. It needs a more elaborate discussion. That is why I deliberately did not invite any one to speak on abortion. One speaker's view is not enough. We should have Educationists, Sociologists, representatives from women's Organisations, Gynaecologists (who will have to bear the brunt of abortion once it is legalised) etc. Speaking on behalf of the Nepal Medical Association, perhaps in the next few months a full scale debate and discussion is coming. Anyway if the wife became pregnant that way, it should be seen in the perspective of social welfare and other aspects. Why should the doctor be blamed for this so-called "failed vasectomy" or the gynaecologist have to do abortion for a woman who gets pregnant from someone else out of merriment.

Vasectomy is simple when everything is anatomically very nice and the doctor could do it is the minimum time. It is complicated when the patient has a filarial scrotum, a large hydrocoele, epidydmal cysts etc. and such cases, if the doctor in a camp cannot tackle them under local anaesthesia, should be referred to a centre with facilities where a surgeon will simutaneously deal with the complications. By not doing vasectomy in the complicated cases we will defeat the cause of family planning.

So with these remarks, most of them out of my personal experience, I conclude my comments on vasectomy. Now going back to my announcing job, Dr Hai-Khan wants to make a few comments.

Dr Hai Khan: "Ladies and gentlemen, I don't want to take much time but I just want to clear a few points. I start with the saying of a famous surgeon that every injury to human tissue is an insult. But still vasectomy is an operation which is offered for permanent sterility so that's why it is justified. I just wanted to clear one point about high motivation mentioned by Dr Gongal. If you go through the entire family planning programme in India and Pakistan and other countries which I came to know from the summary of papers of International Family Planning Conference in Dacca, it is obvious that it is the most important part of the vasectomy programme. I request Dr Rita Thapa to note that high motivation is very important for vasectomy. The second point is about the artery supplying the vas which Dr Gongal has mentioned. I should say that the artery to the vas and the testicular artery make an anastomosis particularly in the region of upper epidydmis. Though this anastomosis is not good, still we can rely on it in cases where artery to the vas is cut, to get good blood supply to the distal end of the vas, as most Anatomists have pointed out that artery to the vas, a branch of the Internal Iliac artery and the testicular artery, a direct branch of the Abdominal Aorta, make anastomosis.

"Third point which our learned colleague Dr. A.K. Sharma has pointed out is that cutting the distal end of vas and seeing whether any semen is coming out is a very practical point because if a surgeon knows during the operation that he is going to be successful he gains more confidence during the operation. I have to mention another point of Dr A. K. Sharma about 2/0 catgut for vasovasostomy. I have come to learn from various literature and from my own experience—it must be an atraumatic needle and very thin catgut 3/0 or 4/0."

Dr Y.B. Shrestha then read his paper on "The Child and Family Planning."