



CHAPTER IV

DISCUSSION

At present, postoperative pain is counted to be one of major detrimental outcome of surgery [28]. Regarding to this concern, there is an improvement in many aspects of surgery in order to relief postoperative pain such as the improvement in anesthetic technique, postoperative care, and the modification of surgical technique. Marsupialization of the fistulotomy wound is the example of modification of surgical technique for the treatment of fistula in ano that was reported in the literature for decades [19-22]. Although there is one report from Ho et al. showing that marsupialization of fistulotomy wound improved wound healing with comparable cure rate [22], there is no study comparing postoperative pain between this technique and fistulotomy alone.

From this study, the postoperative pain score is maximized in the first postoperative day and the pain intensity is reduced in the following day that was showed in figure 4. When repeated measurement was done to this data, it demonstrates that there is a significant difference in every pairs of postoperative pain score in multiple comparisons using Bonferroni test (Appendix A).

Test of between subjects, however, shows no difference of postoperative pain between fistulotomy and fistulotomy with marsupialization. Anyway the result of this study may be masked by the rescue pain treatment after the operation as the patients can ask for pethidine injection in case of intolerable pain. Since then the number of patients requiring pethidine injection in fistulotomy group is significantly higher than fistulotomy with marsupialization group. When we look in the detail of this study, there is one patient who required 2 doses of pethidine injection and this patient expressed the pain as high score on the first postoperative day (VAS=78).

Pain evaluation was decided on postoperative day 1, 3, 5, 7, and 14. The pain score immediately after the operation (postoperative day 0), which may reflect the highest score in each patient, however, was not included in this study because the

score of immediate postoperative pain may be interfered by the effect of rescue pain medication (pethidine injection).

The pattern of pain characteristics in this study is typical for the acute pain which is maximized in the early period after the operation [28,29] since the mean time to first pethidine injection are 7.80 hrs in fistulotomy group and 6.88 hrs in fistulotomy with marsupialization group. After times goes by, the postoperative pain is dramatically reduced as demonstration in figure 4. The difference of pain score between both treatment groups, however, is not demonstrated in this study. This result may be caused by a large scale reduction of postoperative pain score, which is not different among 2 groups after the immediate period. The similar results as no significant difference among both groups are showed in the postoperative pain after the first defecation and the total number of paracetamol usage in 7 days that can be described in the same manner.

Despite of no difference in postoperative pain score, there are more patients in fistulotomy group who needed rescue pain management (pethidine injection). This result can be assumed that fistulotomy with marsupialization improves immediate postoperative pain compare to fistulotomy alone.

Wound infection seems to be higher in fistulotomy group; however, it is not statistically significant. There are many factors contributed to wound infection, one explanation is the contamination of fecal material at the raw surface which will be reduced if the fistulotomy wound is marsupialized (leave less raw surface to be opened).

The patients in fistulotomy group report higher complication than the patients in fistulotomy with marsupialization, however, the significant level is marginal ($p=0.0501$, Fisher exact test). To prove this aspect, more patients will be needed. The detail of the complication in this study reveals that there are 2 patients in fistulotomy group who developed urinary retention which was managed by urinary catheterization. Many causes may be explained to this complication and one of the major causes is perineal pain which may reflect to the acute pain pattern in the early postoperative period. Moreover, 2 patients in fistulotomy group developed postoperative bleeding which is, fortunately, stopped by the conservative treatment. The possible explanation

of bleeding in fistulotomy group is that this technique results in larger perianal wound which has more chance of bleeding compare to fistulotomy with marsupialization.

Incontinence, which is counted to be one of the major detrimental outcomes, was not found in either group; therefore it shows the safety aspect among both techniques.

Conclusion

Comparing fistulotomy and fistulotomy with marsupialization for the treatment of simple fistula in ano, the postoperative pain score, total amount of paracetamol usage, and complication were not different between both groups. However, the number of patients requiring pethidine injection was higher in fistulotomy group than in fistulotomy with marsupialization group. This result can be assumed that fistulotomy with marsupialization improves immediate postoperative pain compare to fistulotomy alone.

Concerning to its efficacy, marsupialized of fistulotomy should be encouraged to be the treatment of choice for simple fistula in ano.