

Patient experience of Pain during Manual Vacuum Aspiration (MVA) under Local Anaesthetic (LA) in the context of Outpatient abortion care.

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Background

Hull University Teaching Hospitals Trust (HUTH) Women and Childrens' Hospital is a busy unit which provides a comprehensive pregnancy advisory service, offering a full range of contraception, sexual health risk assessment and screening, counsellors and support workers, onward referral to other specialist services, and termination of pregnancy (TOP) procedures locally.

These procedures include **outpatient manual vacuum aspiration (MVA) terminations under local anaesthesia (LA) up to and including 10 weeks gestation.**

MVA is a safe, cost-efficient and effective method of TOP that does not require operating theatres, anaesthetic staff or an inpatient stay. It is therefore helpful to be able to provide accurate and relevant information about the patient experience of the procedure to the women in our care

Introduction & Objectives

A patient survey was designed to obtain quantitative data on patient experiences' of MVA under LA, with the aim of **discovering ways to improve care by better understanding the patient experience.** This is particularly important for a procedure that many women undergo, but seldom talk about

Following on from a similar survey completed in 2018, our focus was on patient perceived pain and discomfort before and after MVA, as well as anxiety and pain when compared to normal periods. The survey also covered other areas including contraceptive provision and patient satisfaction with the service.

Methods

Nursing staff administered the voluntary survey before and after outpatient MVA. The survey design was simple and anonymous, with data analysis completed by an impartial external reviewer not working in the department.

Overall, 123 women participated, with gestations varying between 5-10+6 weeks, during the study period covering June 2020-March 2021 at HUTH trust. Only 1 participant did not complete the second half of the survey.

Patients answered the following questions:

Prior to MVA: On a scale of 1-5:

- How painful do you think the procedure will be?
- How uncomfortable do you think the procedure will be?
- How anxious are you before the procedure?
- How painful are your periods?

After MVA:

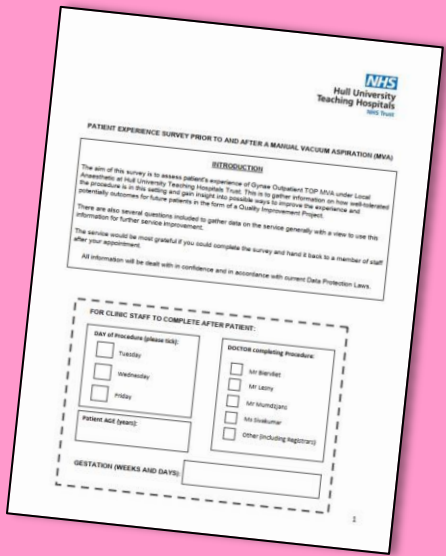
- How painful was the procedure?
- How uncomfortable was the procedure?

Other Questions

- Will you be receiving Contraception during procedure?
- Was the contraception advice given satisfactory in helping you to make decisions with regards to future family planning methods?
- Did the Covid-19 Pandemic affect your decision to have the procedure today? (+ comment box)
- How satisfied are you with MVA service overall? (1-5)
- Would you recommend the service?
- If you were to require a TOP again, what method would you prefer?
- Comments/feedback on the service (free text box)

Data Handling and Analysis

All data was anonymized at collection and handled as per the latest Data Handling legislation. Statistical Analysis was carried out by RL using the Data Analysis Toolpak on Microsoft Excel and included a combination of paired t-testing, correlation and regression analysis.



Average Pain or Anxiety Score out of 5

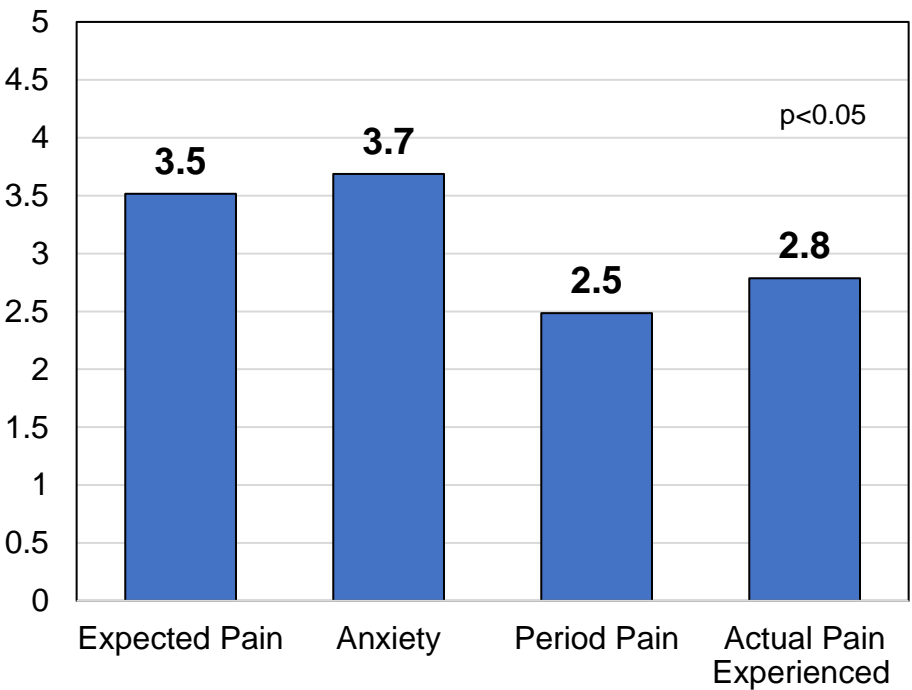


Fig. 1 Average Pain or Anxiety Score out of 5 for all patients n=122

Experienced Pain Scores following MVA

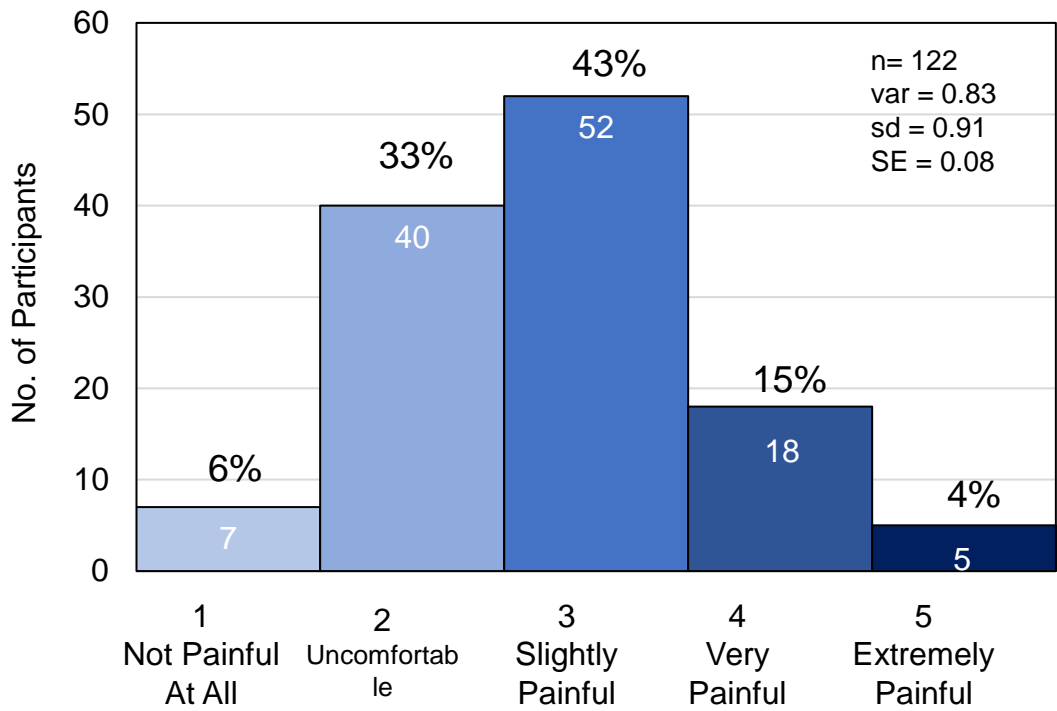


Fig. 2 Experienced Pain scores following MVA with % and counts n=122

On average, MVA was **Less painful** than expected

1 in 3 found MVA to be only “Uncomfortable”

There was **no link** between **Gestation, Anxiety and Pain**

Results

Survey analysis revealed the MVA was less painful than patients expected ($p<0.05$) with average scores dropping from 3.5 to 2.8 out of 5 (Fig.1). The vast majority (82%) found it "not painful", "uncomfortable" or only "slightly painful" and fewer than 1 in 20 gave the highest pain rating of "extremely Painful" (Fig.2).

While the MVA was reported as more painful than period pain ($p<0.05$), average Anxiety score reported was significantly higher than both the expected and experienced pain score (3.7 versus 3.5 and 2.8 out of 5 respectively).

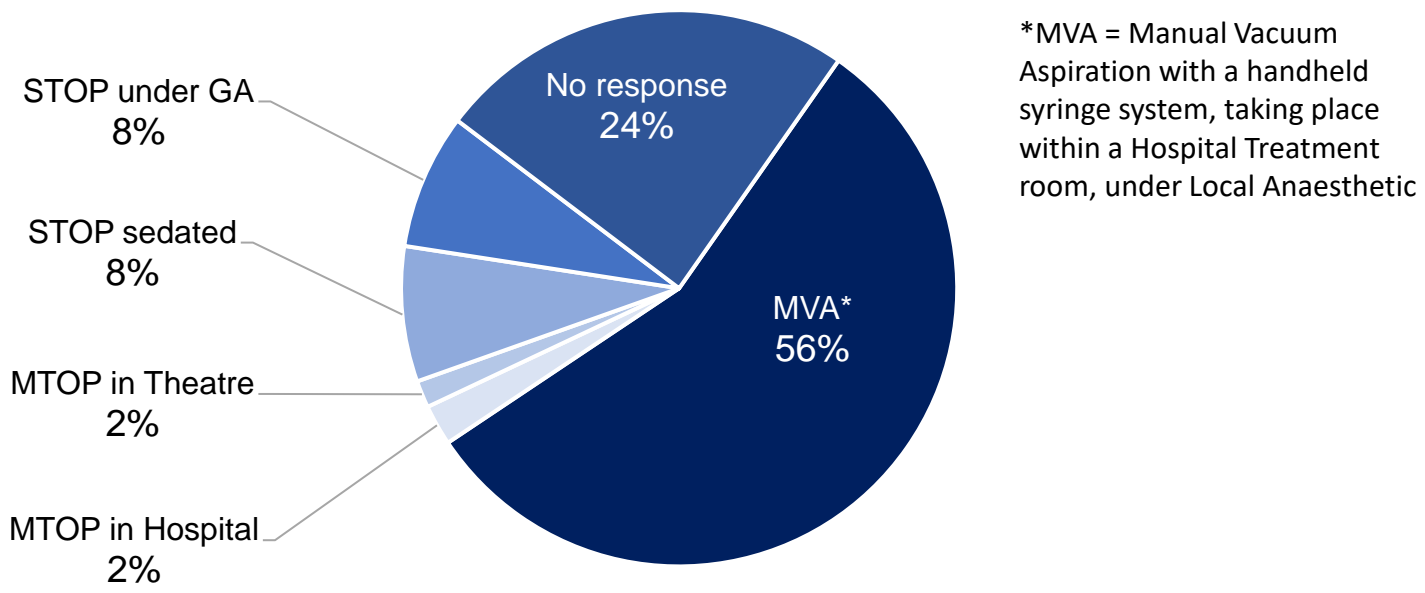
No significant correlation was identified between each individual participants' pain score and their gestation ($R^2 = 0.097$), period pain ($R^2 = 0.0017$), or pre-procedure anxiety score ($R^2 = 0.12$).

Most people (83%) received contraception in concert with the MVA procedure and patients were satisfied with contraceptive advice provided.

A majority of patients (56%) would choose to have an MVA again over medical abortion or termination under General Anaesthetic. (Fig. 3)

98% of patients were satisfied or very satisfied with their overall experience.
Only 10% of patients said their decision to have an MVA was affected by the Covid-19 pandemic

Preferred method of TOP if repeat procedure required



*MVA = Manual Vacuum Aspiration with a handheld syringe system, taking place within a Hospital Treatment room, under Local Anaesthetic

Fig. 3 Response to the question: “If you were to need to end a pregnancy again, which method would you prefer?” n=122

Discussion

It is common for people presenting to abortion care services to ask about the pain associated with different methods of termination. It would therefore be helpful to be able to provide evidence that can inform our patients as to previous patients' experiences, so that they can hopefully be reassured when deciding upon or undergoing a termination procedure.

From this survey it is apparent that the MVA is a largely well-tolerated procedure, with a vast majority of participants here describing it as 3 - 'slightly painful' or lower on a five-point pain scale. If this study is representative of MVAs generally another useful figure could be that 1 in 3 women described the MVA as only “Uncomfortable” or 2-out-of-5 on a pain scale. It is also telling that were they in a similar situation again, most women who responded would opt to undergo a repeat MVA, even over more traditional procedures including STOP in a theatre setting.

It is reassuring that 90% of women surveyed denied that the Covid-19 pandemic had impacted their decision to undergo a TOP, something that could be interesting to study on a broader basis in the context of accurate TOP-during-Covid statistics nationally versus non-pandemic times.

Limitations

Participation in the study was voluntary and completion was not incentivized. As such there was a limited sample size and it is uncertain how many MVAs took place during this period wherein patients decided against completing the survey or their reasons for doing so. There was also one instance where a participant did not complete the second half of the survey. Specific data was not collected on pre-medication on the day of MVA, parity, previous TOPs, existing health co-morbidities, nor demographics including relationship status, domestic violence, reported social support, gender, or racial identity.

Acknowledgements

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Key findings

- Patients found the MVA to be less painful than expected .
- Patient anxiety levels were consistently scored more highly than the pain associated with MVA.
- Patients found MVA more painful than their regular period pain.
- There was no correlation between gestation, period pain, or anxiety and experienced pain.
- High levels of anxiety or period pain reported prior to MVA did not correlate with increased pain scores reported after the procedure.
- Most patients would opt for a repeat MVA over other methods of TOP should they require it.