

Should veterinary professionals progress from standard bitch spays to laparoscopic spays in small animal practices?

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Introduction

Spaying is a routine, surgical procedure performed daily by veterinary surgeons. Approximately 75% of the UK canine population undergo surgical sterilisation (Da Costa et al., 2021). The standard bitch spay is the most common technique, although laparoscopic spaying is increasing in popularity with veterinary surgeons and clients.

This research project explores the benefits and complications of both procedures. Barriers have been identified that prevent clients or veterinary professionals from electing laparoscopic spays.

Veterinary professionals are committed to providing the best care for patients, whilst considering clients' personal circumstances (RCVS 2018a; RCVS 2018b). This research could provide further evidence to support spaying decisions.

Methodology

Using the qualitative research method, data was assembled through semi-structured, one-to-one interviews with five veterinary surgeons.

A reflexive thematic analysis approach was adopted to analyse data (Braun and Clarke, 2022, pp. 34-37), identifying four interlinking themes (Figure 1).



Figure 1: Four Themes

Results and Discussion



Theme 1 – ‘Do trained hands leave smaller marks?’



- ❖ Training and dexterity:
 - ❖ Different skill sets for both techniques.
 - ❖ Dedicating time to practise and perfect techniques.
 - ❖ Include in veterinary surgeon undergraduate curriculum – improve skills and increase confidence.
 - ❖ More trained veterinary surgeons = increased accessibility.
- ❖ Time:
 - ❖ Determined by the proficiency of veterinary surgeons and potential complications.
- ❖ Incision size:
 - ❖ Veterinary surgeon's expertise is influential in determining the incision size.

'It's one of those where the more you do it, the happier you feel...you build confidence and experience using laparoscopic equipment.'

'I think you've got to have a video game mentality (laparoscopic spays).'



Theme 2 – ‘The balance of healing’



- ❖ Complication risks:
 - ❖ Standard bitch spay complications = 25.6% compared to laparoscopic spay complications = 22.58% (RCVS Knowledge, 2024).
 - ❖ Laparoscopic spays are susceptible to a wider range of complications, but risk of occurring is lower compared to standard bitch spays.
- ❖ Recovery:
 - ❖ Activity levels dropped by 62% for standard bitch spays compared to 25% for laparoscopic spays (Culp, Mayhew and Brown, 2009).
 - ❖ Laparoscopic spays offer quicker, more comfortable recovery.
- ❖ Pain management:
 - ❖ Literature presents conflicting views; general consensus concurs that laparoscopic spays are less painful.

'With the lap spay, I think the complication rates are a lot less.'

'Definitely more comfortable after lap spay. You generally don't need to give them a top-up of pain relief.'



Theme 3 – ‘Influencing business factors’



- ❖ Cost:
 - ❖ Laparoscopic spays cost more due to expensive equipment and training costs, creating a barrier to treatment – identify solutions to remove barriers.
 - ❖ Could lead to a social divide where only wealthy clients can afford laparoscopic spays.
 - ❖ This contravenes the RCVS Code of Conduct, where patient welfare is top priority (RCVS, 2018a; RCVS, 2018b).
- ❖ Equipment:
 - ❖ Cost, training, equipment failures, and additional training are laparoscopic spay issues.
- ❖ Client awareness and business acumen:
 - ❖ Services offered to meet demand.
 - ❖ Factors include financial and resource overheads, expertise, retaining staff, attracting clients.

'Cost of the equipment...quite expensive to set up (laparoscopic spay).'

'The clients wanted it...owners are really quite well informed (laparoscopic spay).'



Theme 4 – ‘Defining gold through feedback’



- ❖ Laparoscopic spay feedback:
 - ❖ Benefits are patient focused, less traumatic experience for the patient.
- ❖ Standard bitch spay feedback:
 - ❖ Cost less, require no additional equipment or staff, training is part of curriculum.
 - ❖ Procedure of choice for small, obese, older, or bitches with underlying health issues.
- ❖ Gold standard:
 - ❖ Divided views: laparoscopic spay should be preferred procedure, but standard bitch spay skills are important.
 - ❖ Defining 'gold standard' could be counter-productive, could deter clients from seeking treatment if inference is 'non-gold standard' is a poor alternative (CMA, 2024).
 - ❖ Best procedure should be based on patients' individual circumstances.

'I think contextualised care has got to be the new buzzword.'

'Not one gold standard fits all patients and all owners...we've just got to do the best that we can do for the animal.'

Conclusion

- ❖ Theme 1 indicates patient outcomes are influenced by the veterinary surgeons' proficiency rather than the chosen procedure.
- ❖ Theme 2 suggests laparoscopic spays are more beneficial for the patient – less pain management, fewer complications, quicker recovery.
- ❖ Theme 3 highlights how the cost and availability of laparoscopic spays creates barriers for accessibility, with veterinary practices providing services based on client demand.
- ❖ Theme 4 demonstrates demand for both procedures, but 'gold standard' could be counter-productive.
- ❖ Laparoscopic spay outcomes more favourable in most cases.
- ❖ Barriers to accessibility – cost and lack of availability – remove barriers through initiatives such as subsidising/lowering treatment costs and undergraduate training.

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Future Research

- ❖ Large scale client survey – assess preferences, understanding and knowledge awareness. Identify impacts of cost and availability of laparoscopic spays.
- ❖ Large scale study analysing intra and post-operative complication rates and influencing factors.
- ❖ Long-term trial to include laparoscopic training in the undergraduate veterinary surgeon curriculum in the UK. Assess: impact on skills and confidence of newly qualified veterinary surgeons; if accessibility increases in veterinary practices; if other skills are negatively impacted on.

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