# How long is too long? Patient-centred care in the case of a pilonidal sinus — a reality or not?

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#### **ABSTRACT**

Pilonidal sinus (PS) is a painful, often chronic condition mainly affecting active young males. There is no clear consensus on how to manage the condition. It is agreed the main goal of care is focused on providing cure, with minimal discomfort, low complication and recurrence rate. Ideally after a short acute hospital admission the bulk of care is continued in a community setting with minimal disruption to activities of daily living such as study and work.

This case study is of a young man who struggled with a non-healing PS for 14 months post-surgery. Despite being under the care of the initial attending surgeon for a period following surgery and then general practitioners at his local medical centre, the young man in question felt he was never offered advice on how best to manage the problem, who may be best to help him with the chronic non-healing surgical wound and what steps he had available to him to restore normal skin integrity in his natal cleft.

In considering best practice, patient-centred care and patient rights, this case study highlights supporting guidelines and clinical pathway documents such as the *AWMA Standards for Wound Management* and the Australian Charter of Health Rights, to avoid the potential risk of not considering the patients' viewpoint within the treatment regimen.

#### INTRODUCTION

Pilonidal sinus (PS) is a painful, often chronic condition, mainly affecting active young males. Pilonidal sinus occurs when a hair tunnels inward, gathering sebaceous oils and other debris, causing a localised infected tunnel in the natal cleft. Although it is most commonly reported in the sacrococcygeal region, PS can also occur in the hands and groin. There is no agreement on the best method for repair<sup>1-4</sup>. Multiple techniques including excision and direct closure — midline, asymmetric or oblique; technical flap repairs; Bascom procedure or excision and allow healing by secondary intention are mentioned in the literature<sup>5</sup>.

PS disease, first described in the 19th century<sup>3</sup> is a minor condition for the majority of patients. However, it can cause substantial pain and sepsis, resulting in time off work and school. It is most likely to occur in males aged between 16 years and 26 years of age<sup>6</sup>. It does occur in females; however, the percentages are considerably lower<sup>7</sup>.

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The young man in this case study (AD: not his real initials, altered to protect his identity) had a surgical procedure with direct midline closure 14 months prior to our first meeting. This case will discuss standards of wound management, patient rights, and the impact of a chronic, non-healing wound on an individual. Finally, the case will exemplify the need for clinicians to work together to ensure best practice outcomes.

# REVIEWING ALL RELEVANT PATIENT INFORMATION IN ORDER TO GAIN AN INSIGHT INTO THE PROBLEM

AD was a 23-year-old Caucasian man studying at university. His medical history was unremarkable, apart from having suffered from chronic fatigue syndrome when a teenager, extraction of wisdom teeth and a small problem with overgrowth of bone (Osgood-Schlatter disease) resulting in minor surgery to his fifth metatarsal. There was also nothing significant in his medication history. He had commenced himself on oral zinc and vitamin C supplementation as he had heard this may improve wound healing. AD was studying Chinese medicine at university so had occasionally taken undisclosed Chinese herbs over the past 14 months to try to heal his wound.

There was no family history relevant to this case. AD's father also had a PS; however, PS is not known to be either a genetic, nor familial condition. It is more commonly seen in hirsute males with a deep natal cleft, and this can sometimes be linked to ethnicity — it is

common in Mediterranean countries and rarely seen in East Asia, Oceania and sub-Saharan Africa<sup>7</sup>. AD lived in a rented house close to his university with his girlfriend of three years (SA: not her real initials). SA was a student nurse. Both had part-time jobs and were self-supporting. They survived on a very tight budget. AD's mother lived in another state, over 2,500 kilometres away.

#### FIRST PRESENTATION

AD was a self-referral to the general practice centre where a wound nurse consultant was employed one day per week. His mother 'Googled' the clinic services, obtaining the mobile contact number for the wound specialist. Her anxiety concerning her son's general health and mental status prompted an urgent home visit. Home visits are not normally conducted on weekends; however, the stress of the situation, and history of the wound required intervention and support as soon as possible in order to establish the facts and guide the patient towards achieving a better outcome.

AD was a quiet, gentle, softly spoken young man. He appeared most accepting but at the same time frustrated with the care he had received to date. After establishing a rapport, the wound was examined,

finding a hypergranulated wound approximately 0.5 mm x 0.7 mm. The pad used as a wound dressing had been changed only two hours prior to the visit and appeared to have only minimal exudates. AD stated that at the movies the day before, when he stood up to leave the theatre his pants and the seat were stained with blood covering an area approximately 8 cm x 6 cm. AD was stressed and anxious as the wound had been non-healing for over 14 months; he expressed concern that no one seemed to care or be able to guide him as to what to do to get the wound healed.

#### THE CASE

AD and his partner reported that all postoperative instructions concerning the wound had been followed. Sutures were removed at two weeks by the surgeon; however, the suture line reopened almost immediately. The surgeon cauterised the open areas at each subsequent follow-up and instructed AD to apply Betadine<sup>TM</sup> and gauze to the area daily. No follow-up appointment was organised.

The patient and his partner were concerned by the lack of discussion and explanation as to what he could expect, when the area would be fully healed, what activities he may resume and what he should avoid.

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The patient stated that, "The surgeon was in a hurry to get us out of the door".

Given the history of AD's previous chronic fatigue syndrome and knowing that he was studying, working part-time and self-supporting, it is possible that stress would have played a part in delaying his normal healing and influence the outcome of this surgery<sup>8</sup>. AD stated that no discharge services were provided or discussed and so he and his partner had been managing the wound for the past 14 months, not knowing where to get help.

AD had consulted other health professionals over the 14-month period for other health-related matters and for the wound; however, none had suggested seeing a wound specialist. If a wound is not healed in four weeks, it is suggested that a wound specialist be consulted AD expressed his concern that no one he approached within the medical settings was able to assist and provide answers to his questions and help the healing of his now-chronic wound.

#### INITIAL HOME VISIT BY WOUND SPECIALIST

At the first home visit there was discussion about the type of tissue within the wound, what the evidence suggests could be the cause of this tissue development and how to manage it. It was clear this case was complex and may require further collaboration with other health professionals in order to promote rapid healing in the future.

The tissue seen within the wound was hypergranulated, which is reported to be observed in infected, critically colonised wounds or where a foreign body may be present<sup>10</sup>. The wound specialist has had success in managing this tissue type with a daily hypertonic saline dressing. SA was shown how to attend the dressing, and a review appointment was made the following week at the wound specialist's clinic where a more definitive exploration of the wound could be conducted under better lighting. Emergency telephone and email details were provided should AD and his girlfriend feel the need for extra advice in the intervening week.

#### SECOND CONSULTATION

One week later AD was seen in the general practice clinic where the wound specialist was located. The wound could now be more fully examined with the aid of an overhead anglepoise light and appropriate examination table. The hypergranulated tissue had resolved, revealing a second cavity superior to the first sighted wound. There was extensive undermining although the wound was clean, with goodquality granulation now present.

It was time to discuss management options. Was it possible to continue to try to heal with more appropriate dressings and close supervision? Should a surgeon be involved and try again to close directly? All explanations, rationales and possibilities were provided to AD and it was decided to seek another surgical opinion in order to restore wellbeing and contentment as quickly as possible, so that he could put in a one hundred per cent effort in his final year of studies.

#### **CONSIDERING BEST PRACTICE**

The AWMA Standards for Wound Management are standards related to professional practice, clinical decision making, and assessment and planning, clinical practice, documentation, education and research<sup>9</sup>. Best practice wound care, according to these standards, acknowledges the central role of the individual and their carer in wound management and relevant health care decisions. Standard 1 also mentions interprofessional collaboration and coordination of care, recognising the knowledge, skills and contributions provided by each member of the team.

The Australian Charter of Healthcare Rights in Victoria<sup>11</sup> state that the patient has a right to access health care, a right to receive safe and high-quality health care, a right to be shown respect, and to be treated with dignity and consideration, a right to be included in decisions and to make choices about their health care, a right to privacy and confidentiality of personal information and, finally, a right to comment on their health care and have any concerns addressed.

There are a number of best practice wound documents available to guide clinical care. Harding states that many health care providers have not committed to clear protocols to guide the management of wounds and, as a result, many patients are managed without clear treatment goals or obvious pathways of care<sup>7</sup>. When a patient with a wound is managed inappropriately they can suffer from failure to heal, which results in the wound being present for longer that is necessary and an increased risk of complications.

A recent consensus document titled *Optimising wellbeing in people living with a wound* establishes a framework that ensures clinicians are able to maximise patient wellbeing when delivering effective wound care<sup>12</sup>. The consensus document highlights that while the physical aspects of a wound can be measured with various tools, the concept of 'wellbeing' is more difficult to measure. The cover page of the document contains keywords appropriate to this case: fear, stigma, anxiety and frustration. Patients have a right to expect that none of these would exist when care is directed and planned primarily for them. All parties are engaged in the process of wellbeing.

#### FINAL CLINIC VISIT

AD was referred to a new surgeon in his home state. Surgery was planned. All after-care was strictly adhered to. Knowledge of nutrition, hygiene and tissue support has helped AD to have a completely healed wound three weeks after his second surgical procedure for PS.

#### **DISCUSSION**

This case study exemplifies the need to have a methodical approach to wound care. When wound healing deviates from the normal then action should be taken to restore a healing pattern and achieve a quick outcome for all concerned.

AD had a deep natal cleft with multiple abscess sites. According to McCallum<sup>1</sup> surgery is one of the best options for managing a PS. The literature<sup>13</sup> also states there is a high percentage of recurrence.

After a second round of surgery, however, ninety-five per cent never recur again<sup>14</sup>. Therefore, the original surgery was appropriate but the question remains why had no health professional encouraged a review by either a wound specialist or another surgeon when the wound remained unhealed for 14 months? Where was the duty of care? What is the expected healing time and when should additional help be sought? Had the rights of the patient been considered and was best practice being followed?

The treatment regime following dehiscence post-suture removal would appear appropriate given the nature of the wound and the very small dehiscence<sup>14</sup>. Due to the location and nature of PS there is likely to be a high inoculum of bacteria in the region and Betadine<sup>TM</sup> is a well-known skin antiseptic<sup>10</sup>.

#### **BEST PRACTICE**

A directly closed surgical wound should be epithelialised within one to two weeks. Researchers have shown that complete healing after inflammation, proliferation, granulation, epithelialisation and remodelling will take over 12 months<sup>15</sup>. Surgical wounds require support until the scar is well formed and tensile strength is maximised.

Post-surgical review is generally conducted weekly until sutures are removed. At this time if the suture line is of acceptable appearance the surgeon will discharge the patient from care with an overriding statement of 'should you have any further problems, please contact me again'. The surgical dehiscence was minimal when the sutures were removed; however, AD felt that his surgeon had minimised the open wound with a statement that, 'it will be all OK in time'. No follow-up appointment was provided and AD reported that he was not provided with any encouragement to contact the surgeon if he was worried.

Wound management literature states that if a wound is not 40% epithelialised within four weeks it is identified as chronic and requires further investigations as to why the healing is slow. These investigations may include: wound swab or wound tissue biopsy, x-ray, CT scan, ultrasound or more specific to the lower limb and vascularity. In AD's case, none of these had been requested by any of the health professionals until requested by the attending wound consultant.

Many wound management training resources state that when caring for a patient with a non-healing wound an holistic approach should be considered<sup>12</sup>. The emphasis has been placed on physical, mental and spiritual aspects of wellbeing<sup>12</sup>. Depression has been linked to poor healing<sup>8</sup>. AD had a history of chronic fatigue syndrome and the situation of non-healing, discharge from the wound, leading to embarrassment, and reliance on his girlfriend for procedural dressings meant that AD was at risk once again of a sense of loss and disempowerment.

#### **CONCLUSION**

All health professionals should be aware that wounds are not normal. A non-healing wound is a sign of an underlying problem.

Directly closed surgical wounds should be healed within two to three weeks and, if not, then further investigations and review should be conducted until the underlying aetiology/problem is found. The AWMA Standards of Wound Management<sup>9</sup> should be known to all health professionals. Basic wound care education should be included in all surgical health professionals' training — medical and nursing.

The patient should always be the focus of a care plan. Understanding normal wound healing pathways to identify abnormalities and then target known factors influencing healing is considered best practice. Standards of wound management have been written to guide practitioners towards a structured approach to wound care through collaboration and research.

#### ACKNOWLEDGEMENT

AD, the patient in this case study, has provided full consent for this case to be discussed and would like to participate in further work to highlight the needs of patients with wounds.

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