Patients experiencing local anaesthesia and hip surgery

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Aims and objectives. The aim of this study was to show what the experience of local anaesthesia and a surgical situation meant to patients.

Background. Many patients who receive local anaesthesia will remain awake during surgery. The very fact of staying awake causes psychological and psychosocial needs. These needs must be met and it is therefore important to identify them.

Design/method. Seven patients (aged 61–79) experiencing local anaesthesia and hip surgery (hip replacement surgery or repair of fractured hip) were interviewed. An interpretive phenomenological method developed by Benner was used to extract the experience of what it means to be in local anaesthesia and surgery. One paradigm case is used to illustrate the results.

Results. Results show that the well-being and comfort of patients is compromised by challenges such as severe pain and long waits, which may be experienced as endless and which leave the patient thinking of nothing else. By contrast, the experience of trust helps the patient to feel control even in situations where the treatment is hard to grasp.

Conclusions. The results highlight that local anaesthesia and surgery force patients to overcome and handle experiences of pain, trust and distrust as well as feelings of alienation and unreality.

Relevance to clinical practice. The results illustrate the patient's needs, as seen from the patient's perspective. A shared experience makes it possible to understand, and thus to recognize, the required qualitative care to facilitate and to help the patient to remain in control and face the psychological challenges presented by anaesthesia care and surgical situations.

Key words: acute care, advanced nursing practice, elder care, hip surgery, local anaesthesia, patient participation, phenomenology

Introduction

Medical and technical developments in anaesthesia and surgical care have made the treatment and care of more vulnerable patients possible (Klafta & Roizen 1996, Learman 2000, cf. Larsson 2004). The populations in all western countries are ageing. This will have a direct impact on future anaesthesia and surgical care because of the increasing age and numbers of patients (Suhonen *et al.* 2003). One objective of anaesthesia care is to ensure that the patient is comfortable, another to promote patients' well-being and also identify their physical needs (Wood 2001, Kolcaba & Wilson 2002, Rudolfsson *et al.* 2003, Wilson & Kolcaba 2004). Older patients often have multiple problems. For example, they may suffer from pain, delicate skin and malnutrition. All such conditions must be taken into account when preparing patients for anaesthesia and surgery (Rohdes *et al.* 2003, Suhonen *et al.* 2003). Technology and science are only one part of a complex experience in the anaesthesia care and surgery situation (Royston & Cox 2003). Efficiency demands, heavy tight schedules are other factors that have a major impact on the patient in the context of anaesthesia and surgery (Larsson Mauleon *et al.* 2002, Flin *et al.* 2003, Heggen & Wellard 2004).

Patients who are listened to, who are treated respectfully and who are shown concern, are said to feel more secure, because they feel that they participate and play an active role in shaping their situation (Åkesdotter Gustafsson *et al.* 2001). However, it has been argued with reference to emergency care – an area, i.e. in some respects similar – that the desire of older patients to know and understand what is going on, and so what is happening to them, is often neglected (Nydén *et al.* 2003).

Anxiety, fear (Caumo *et al.* 2001, Mitchell 2003), discomfort, pain and agony – in regard to anaesthesia care and surgery – are well-known concerns among surgical patients. These concerns must be recognized, not least when caring for older patients (Klafta & Roizen 1996, Willson 2000), as any patient undergoing anaesthesia care and surgery leaves himself or herself in the hands of care providers (Lindwall *et al.* 2003, Larsson Mauleon *et al.* 2005). The patient's body will be partly naked and touched at some stages during the stay in the operating room; which might violate their integrity (Suhonen *et al.* 2003). Patients who receive local anaesthetics will remain awake (apart from those who are sedated) during surgery. The very fact of staying awake can cause fear. The patients might fear such things as 'needle pricks'. Old wives' tales, rumours

and misinformation might cause fear of paralysis. And because local anaesthetics produce sensory and motor blocks, patients cannot feel or move as usual. The intensity of sensory and motor blocks varies from one type of anaesthetic and place of administration to another (Stoelting & Miller 1994). How the individual patient experiences this kind of situation requires and deserves attention and investigation (Prowse & Lyne 2000). It is argued that care providers must try to see things from patients' personal perspectives. This meaning includes patients' views of health and illness and their experiences of nursing care (Benner 1994, 2001). The aim of this study, then, was to show what experiencing local anaesthesia and a surgical situation means to patients.

Methods

This study is based on the interpretive phenomenological approach developed by Benner (1994, 2001). argues that people who have the same experiences of the same kind of thing have something in common. They may share a sense and meaning, which is something that others can learn and benefit from (Benner 2001). The interpretive phenomenological approach emphasizes the way persons dwell in the world in terms of meaning and acting. It highlights the way in which people are constituted by and constitute these meanings. In the present context, the focus is on individual patients' experience of local anaesthesia and hip surgery situations. Benner's (1994, 2000) method was used to give insight into everyday local anaesthesia and hip surgery situation.

The interpretive phenomenological method is based on the use of a paradigm case, which is a selected episode that may serve to give new insight (Benner *et al.* 1999). The use of paradigm case recognition potential provides inroads to understanding meanings of similar experiences and situations, which may, otherwise, be difficult to grasp (Benner *et al.* 1999). The purpose was to provide sufficient examples derived from data to facilitate validation of the results. For this reason a significant phase in the interpretation process included the identification of a paradigm case (selected episodes from the data) that offered examples of episodes of concern, issues and actions that were embodied in the patients' experiences and modes of acting.

Settings

Hip surgery (hip replacement surgery and repair of fractured hip) with regional anaesthesia was selected. Regional anaes-

thetic situations in connection with orthopaedic situations were chosen because they are common treatments (Shabat *et al.* 2003). These are relatively large operations performed with regional anaesthetics. On average, the entire procedure takes about 2.5 hours. It includes preparation of the patient, anaesthesia and surgery. Hip replacement surgery itself takes about one hour and the repair of fractured hip at most one hour. Patients are awake all or most of the time during the entire procedure. Efficiency demands, routines and strict surgical office schedules control anaesthesia and surgical contexts.

Participants

The patients in our study were awake during the procedure. As the operating room is a technical place, they were surrounded by technical anaesthesia and surgical equipment. It should be added that the patients met the whole team of care providers: nurse anaesthetists, operating room nurses, surgeons and anaesthesiologists, in the operating room. The experiences of the patients relate to orthopaedic operating rooms in three large hospitals with emergency centres in an urban area of Sweden. The majority of patients at the orthopaedic, surgical and anaesthesia departments were aged 60 years and older. Five women and two men, aged 61–79 (one person was 61 and six persons were over 70 years old), were interviewed. All three hospitals were national health hospitals where patients do not pay for surgery. Besides willingness to participate, the selection criteria were the following:

- An age that was representative of patients at an orthopaedic department;
- Scheduled and acute hip surgery patients (hip replacement and repair of fractured hip) who had surgery in regional anaesthesia;
- No known memory problem and ability to recall the anaesthesia care and surgical situation experiences;
- Ability to describe those experiences;
- No stated complications in the medical journal that were related to local anaesthesia and surgery;
- No personal ties/links to the anaesthesia and surgery department (to feel free when describing experiences).

Patients who had undergone scheduled (hip replacement surgery) anaesthesia care and surgery and patients who had undergone acute (repair of fractured hip) anaesthesia care and surgery were recruited. The idea was to obtain rich data relating to older patients' experience of local anaesthesia and surgery situations.

Three participants who had scheduled surgery were recruited through a regional osteoporosis association. The chairperson informed members about the study and criteria

for participating in it. Three people fulfilled the criteria and were asked to participate. This study's first author contacted these three by telephone and gave them additional information (written and verbal notification).

Four participants who had acute surgery were recruited at a convalescent hospital. The department's head nurse told them about the study after their arrival at the hospital. All participants received written information about the study before they agreed to participate. This study's first author contacted these four after their agreement to participate and gave them additional information.

Ethical considerations

All participants were informed that participation was voluntary and that they could stop participating at any time and without any consequences for their future treatment and care (written and verbal notification). The first author explained the purpose of the study and that the study would maintain the anonymity of all participants. The first author asked them to select a time and place for the interviews. All patients had the opportunity to ask questions and contact the first author before and after the interview. Permission for the study was granted by the Research Ethics Committee at Karolinska Institutet in Stockholm (no. 96:197; 04-374T).

Data collection

Data were collected during a period of six months June–September 2003. The interviews took place five to ten days after surgery. Data were collected through interviews that focused on informants' (interviewees') narrations. The first author, who invited the patients to participate and obtained their permission to be recorded and interviewed, explained the aims and objectives of the study to the participants. Interviews with two participants were conducted in their homes. One participant was interviewed in the office at the osteoporosis association. Four participants were interviewed in a separate room at the convalescent hospital (cf. Kvale 1996). The venue for the interview was selected to ensure privacy and avoid any disturbance. The first author collected all data.

The participants were asked to narrate their experiences during the entire anaesthesia care and surgery situation clearly. This situation was defined as: 'from the moment you arrived until the moment you left the surgery department and were put in your ordinary hospital bed'. The interviews started with the following request: 'Please describe the event of undergoing local anaesthesia and surgery as you experienced it'. The participants were encouraged to speak freely

about their experiences. They were only interrupted when clarification was needed, i.e. when it was difficult to understand what they meant. Thus any questions raised were of the nature: 'How can I understand that?', or 'Tell me more about that', or 'You mentioned something before about that'. The one-to-one interviews lasted about 90 minutes and were recorded with the participants' permission. The first author transcribed all interviews verbatim.

Data analysis

Data were analysed using this process (stage 1–6):

- 1 Verbatim-transcribed narratives were read several times to gain a general understanding of narrative context and thus of the patients' experiences of being in anaesthesia care and surgery;
- 2 Each interview was read and interpreted separately. The focus here was on episodes experienced by the older patient;
- 3 'Strong'/significant episodes of anaesthesia care and surgery were selected. These offered examples of particular concerns and response in attitudes or actions;
- 4 The selected episodes were analysed. This was to gain an understanding of what it means to be in anaesthesia care and the surgery situation. The aim of the interpretation process was to uncover and identify hidden meaning in the text. The procedure involved different analytical transformations of the text, allowing the researcher to ask questions and probe into different features of the episodes in search of answers that might throw light on the older patient's experience of being in an anaesthesia and surgery situation;
- 5 Descriptions with similar content were looked for, identified and organized into four sub-themes and one main theme relating to particular experiences. This was to show what local anaesthesia and hip surgery means for older patients;
- 6 Finally, one paradigm case was identified and selected from among the significant episodes. This was with the aim of highlighting certain aspects of the subject's experiences. The selected paradigm case is presented as a point of departure for understanding the results.

To validate the sub-themes, main theme and paradigm case (selected episodes) that emerged from the analyses, they were first discussed and reflected on by the co-authors, as well as in regular seminars focused on qualitative research, before any final decision was made.

Results

When the patients were asked to describe the experiencing of local anaesthesia and surgery, one main theme emerged:

'compromised well-being and comfort'. The main theme was highlighted by four sub-themes illuminating different challenges of experiencing local anaesthesia and surgical situation: 'sensing pain', 'waiting and experiencing time as endless' 'feeling alienation and experiencing surrounding as unreal' and 'sensing trust and distrust'.

The paradigm case was selected because its content illustrated specific ways of perceiving and experiencing local anaesthesia and surgical situation. The paradigm case shows that local anaesthesia and surgical situations result in challenging situations. Based on lived-through examples, this paradigm case illuminates in what ways local anaesthesia and the surgical situation compromised well-being and comfort. The paradigm case shown below is taken from selected transcribed text.

Paradigm case

I only saw that boot connected to the operating table, and I didn't know why it was there. For me it was very difficult when they had trouble injecting the anaesthetic in my back. It was impossible for me to judge and to know whether I was lying in a correct position on the operating table. I was in such pain when they were cutting, poking, and chipping away. We can't demand pain relief in this situation. I was just lying there like a bundle of bones. I thought that they'd be finished soon. It was such painful agony; I was in tremendous pain. The wait and agony are endless, and you are just long for it to stop. Agony goes deep down into you. So you start wondering if it's going to kill you. I couldn't think of anything else than hoping for it to be over. You just have to live or stay in that moment of pain. It didn't end until my legs were becoming numb. Then it's your back and all the nerves start from there. Will I be able to move and walk again or will I be lame? It's a strange feeling when your body disappears from yourself and is left as half a person

All wait situations are experiences of uncertainty. A wait is something that you really want to avoid. A wait has no end, I don't think it has an end. I fear my next operation because the time is experienced as endless in this situation. You get worried when entering the area (the operating room), and then you overreact when you hear some noise. There's no going back when you're lying on the operating table. You have to get it over with, so you have to trust the people who are helping you. I'm not religious but I have this hospital. It's the same as my church. It's up to you – you can relax. I know that they're going to cut my body. The operation was unreal to me, and it didn't concern me. And all the sounds are just like being in a mechanical workshop or service station with all the noise. I was visiting a service station and they were sawing, hammering and talking about cement. I really do remember it very well. I didn't think of it as my leg; I didn't recognize the situation as involving me. They don't treat you with a cautious hand. They just hook up the leg as if to carve a chicken and then they saw. I understand that – but my leg is larger – it is not just a chicken leg – it is slightly bigger, and they were at least two of them holding my leg. Now this situation is over, but the situation is still in the back of my mind

Compromised well-being and comfort

Sensing pain

Many narrated events showed that pain is something most of them expected and recognized as something that they must accept. Suffering from pain was thought of as a natural thing. According to the patients, pain was an inevitable experience in relation to anaesthesia care and surgery – as evidenced in many of the narrations like this: ‘getting cured comes at a price.

Severe pain was shown to be a major concern in many narrated events. The presence of severe pain seemed to be recognized as a here-and-now experience and as an endless experience of agony that could not be escaped from. In some of the episodes, suffering from severe pain was shown to have influenced the patients’ minds to such an extent that they could not think of nothing else. As one patient put it: ‘just imagine a dentist drilling deep down in your tooth, you can’t move or escape, you are placed in agony without stop’. This sense of severe pain had remained in the older patients’ minds and had created anxiety and fear of future severe pain experiences. Pain raised a call for relief and for meaning; the experience was described in the narrations and demonstrated in the paradigm case in the form of questions to which the older patients wanted answers: ‘Why does it hurt so much?’ and ‘Why are they not giving me pain relief?’

Waiting and experiencing time as endless

The narratives revealed that waiting was a common, recurrent experience and that the waiting was experienced as endless. In some narrations, waiting was described as an experience of uncertainty. As also in the paradigm case, in many of the narrations the experience of waiting was recognized as a long-drawn-out event. Time was felt to slow down in situations experienced as difficult. There was a discrepancy between older patients’ descriptions of a long period compared with what was described as actually going on in terms of treatment. What seemed a long period for the older patients was described as a busy period for care providers, for example, in a situation of severe pain, as described in the paradigm case. In some situations of waiting, surrounding conditions affected the older patients’ feelings of uncertain and sensation of severe pain. In some situations time stood still for them.

Feeling alienation and experiencing the surroundings as unreal

The older patients referred to themselves in very realistic terms while looking at themselves and the event from a distance. Yet they were confirming for themselves that they had been in the

actual situation by referring to their uncertainty, their bodies and evidence on their bodies, such as scars and blisters. Many narrations illustrated that the older patients looked at themselves and talked about themselves as if they were taking part in their own situation as outsiders. The actual circumstances seemed to be perceived as unreal, as described by the paradigm case. The older patients experience themselves as attending observers, e.g. ‘like visiting a service station...I didn’t think of it as my leg or me being operated on’.

Many of the older patients heard sounds of sawing and hammering, and they seemed to have mixed feelings about that experience. Unexpected sounds, as demonstrated in the paradigm case, and things that turned up suddenly, new things and objects the use of which was unknown and not understood put the patients on their guard. These kinds of experience raised anxiety and stress, especially among those patients who from the start had no confidence and had no sense of trust. It was shown that inability to feel confidence and trust, because of insufficient knowledge, made it difficult for older patients to understand, keep track of and participate in their own situation when the surroundings were experienced as unfamiliar. The older patients’ lack of knowledge/understanding caused a sense of inability to influence or to participate in decisions concerning themselves at the time. As demonstrated in the paradigm case, this kind of situation made them ask questions that expressed worries and feelings of anxiety and insecurity in relation to the treatment and about what would happen to them or their bodies. For example, older patients were worried that treatment might affect the body in a way that would influence their future health.

Sensing trust and distrust

The experience of distrust led to feelings of uneasiness and anxiety. As demonstrated by the paradigm case, many of the situations in which the older patients felt distrust led to a feeling of not being safe. This experience, in turn, made the patients feel that they had to be on their guard. The narrations also revealed that in some situations the patients were alternating between states of trust and distrust. The trust-distrust experience occurred when they recognized that they had little or no choice – if they wanted to get well. They believed that they had to accept the situation of anaesthesia care and surgery as it was; there was no other way. The patients felt that they ought to be confident and trust the care providers. They wanted the benefits of surgery and felt forced to trust the care providers in anaesthesia care and surgery. Sensing trust seemed to give confidence even in situations that were experienced as difficult. One interviewee said: ‘I know that they’re going to cut my body. There’s no going back

when you're lying on the operating table. You have to get it over with, so you have to trust to the people who are helping you'.

When the patients felt they were ordered about and they could not resist or argue, this led to distrust and a sense of anger and disappointment. On the other hand, the narrations showed when patients experienced a sense of trust this made them feel safe and confident. The trust and confidence seemed to make the older patients feel less anxious and more relaxed. One patient said: 'I'm not a religious man but I have this hospital. It's my church; it's the same as being in church'. The narrations showed that sensing trust helped the older patients to maintain and increase a sense of control in their situatedness. One patient expressed control like this: 'It's up to you – you can relax'.

Discussion

This study focused on challenges that patients might have to face and overcome in local anaesthesia and surgery. The results show that well-being and comfort are compromised by suffering from pain; having to wait and feeling alienation when seeing oneself as an outsider in an unreal surrounding. However, the experience of trust helped the patient to feel control and overcome situations even when they were hard to grasp. Studies using a qualitative approach aim to obtain interviews that are as rich as possible. Sufficient depth of information needs to be collected in sound qualitative research, but there is no need to have a fixed minimum number of participants (Fossey *et al.* 2002). Through their own stories, narrating experiences of different types of hip surgery, the patients included in this study conveyed in-depth knowledge and rich data about what it is like to be in a local anaesthesia and surgical situation. Although our sample size is rather small, we still find the results a valuable contribution to knowledge about patients' experiences of similar situations.

Despite earlier research (Leinonen *et al.* 1996, 2001), which shows that pain was hardly indicated among surgical patients in the surgery department, pain was an issue of major concern for the individual patients in many of the events described. As suggested by earlier research, it must be considered in relation to the question of how the context influences the experience of pain (Sjöström 1995, pp. 16–20). It would appear that some patients and carers think that pain is an inevitable consequence of treatment (Aaron *et al.* 2001, Byers *et al.* 2001). Other researchers (Matiti & Trorey 2004) point out that patients who feel that they are in difficult situations tend to rationalize their positions and therefore accept whatever difficulties they encounter, as long as they

get better. Patients also accept the situation because they know it is temporary (Nilsson *et al.* 2002, Matiti & Trorey 2004). In the present study the patients seem to think of pain as something that they have to accept. However, our results also illustrate that the feeling of accepting pain arose when the patient yielded to a demand to get well, as they had no choice, because there was no going back.

Anticipatory anxiety increases pain and distress (Sjöström 1995, pp. 130–149, Aaron *et al.* 2001, Byers *et al.* 2001), and severe pain absorbs all attention (Madjar 2001). This might explain why the older patients experiencing such pain did not firmly express and call attention to their pain and their need for anaesthetics. It has been argued (Voepel-Lewis 2004) that pain assessment must be relative to patients' communication capabilities. Yet this study shows that the experience of severe pain might have hindered the patients from communicating. This raises the question of how to identify the older patients' needs as well as needs to create a proper climate for qualitative care and communication when they are occupied by pain. Madjar (2001) claims that a patient's very call for meaning and his or her search for questions provides clues to how the care and treatment providers communicate (Madjar 2001). Matiti and Trorey (2004) also claim that patients use a strategy for adjustments in situations of potential violation. They subordinate themselves to cope with an imbalance of power and control. They regard themselves as anonymous, which makes them lose their identities (Matiti & Trorey 2004).

The results show that waiting was a recurrent and common experience. The patients stated that having to wait led to an experience of being in an endless situation. How are we to understand what endless means for patients? The difficulty of measuring subjectively experienced time is a major problem because the subjective experience of time is seldom studied in its own right (Jones 2001). Arguably, time is to be viewed as an experience within a subjective dimension that includes past, present and future (Walsh 1997). As a subjective dimension, time is pregnant with meaning and value in regard to people's expectations, fears and hopes (Jones 2001, Madjar 2001, Buetow 2004). Experiences may not correspond to real time in terms of minutes and clock time (cf. Gibson 1994, Jones 2001). Instead it is what holds meaning in the situation that concerns the patient and gives meaning or fuel to the experience.

Lindwall (2004) claims that patients separate body and mind in situations of treatment when the focus is on their bodies and sickness in surgery situations (Lindwall 2004). The results in this study show that treatments were recognized as unreal and hard to grasp and that in such situations the patient experienced a sense of distance from his or her

bodily self and physical situation. The patients talked of 'visiting a service station' and said 'I did not think of it as my leg'. In this light we, moreover, argue that experiencing a distance to oneself in some situations is not the same as seeing oneself as being separated in body and mind or parts of a body (the leg). Rather, the results in this study indicate that the circumstances give rise to a sense of inability or lost control to get in touch with one's own body.

Implications for nursing practice

The challenges faced by older patients in anaesthesia care and surgery situations significantly interfere with their comfort and well-being. It is, therefore, important to identify the challenges they face in order to provide qualitative care. A largely individual and subjective experience cannot be shared or entered directly. But the interpretation of such experiences and presentation of them in language that captures core aspects of what it means to be in local anaesthesia and surgery may help bridge the gap between the perspectives of patients and care providers. This may make it possible to provide support and care from a patient perspective.

Contributions

Study design: ALM, L P-B, S-L E; data collection: ALM; analysis: ALM, L P-B, S-L E and manuscript preparation: ALM.

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