“Is my eyesight gone?”

Patient perspectives of orbital blow-out fractures

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Abstract

Purpose
To understand patient’s experience with blow-out fracture of the orbit and its possible influence on management
Design
A purposive, non-probabilistic, sample of 21 patients treated in a secondary care hospital were interviewed. Interviews were recorded and transcribed verbatim and data analysis continued until saturation. A framework approach was used to help organise the data and the principles of the constant comparison method were adopted to analyse the data.
Findings
Patients with blow-out fractures of the orbit perceived the diplopia associated with the injury as an eye injury with the potential for loss of vision. They found it difficult to relate such concerns with the clinical information described by surgeons and this, and the injury itself, negatively impacted on their everyday lives.

Introduction

Blow-out fracture of the orbit, which is a fracture of the orbital wall/floor without orbital rim involvement, is associated with significant morbidity(Brady et al., 2001; Hosal and Beatty, 2002; Jones, 1994). Management of blow-out fractures has been a controversial subject (Alinasab et al., 2012), with dispute involving mainly the decision to either surgically or conservatively manage the fracture in the first instance (Alhamdani et al., 2015; Harris, 2006). Despite the volume of research in this area (Alinasab et al., 2012; Bandyopadhyay and Sapru, 2004; Banks, 2007; Dutton, 1991; Hartstein and Roper-Hall, 2000; Jones et al., 1997; Logani et al., 1996) there is still a lack of reliable evidence of satisfactory outcome in terms of the major complaint associated with blow-out fractures, diplopia (Harris, 2006). Diplopia has a broad scope of both functional and psychological effects (Beauchamp et al., 2005). It has been found to be strongly related to various negative feelings such as anxiety, depression, confusion, fatigue, anger and tension (Hatt et al., 2007). Despite the fact that diplopia is a subjective symptom (Sleep et al., 2007) the patient’s experience of diplopia, nor indeed of blow-out fractures, have never been examined using qualitative research. The aim of this study was, therefore, to critically examine the patient’s experience of blow-out fractures in order to better understand how to improve management from their perspective.

Methods

After obtaining ethical approval, a purposive maximum variation sample (n=21) was taken from patients attending the Oral and Maxillofacial Department in a Secondary care hospital in the United Kingdom with blow-out fractures of the orbit. Sampling criteria were: preoperative and postoperative surgically managed patients; conservatively managed patients; gender; age >18; severity of BSV (low, middle and high score categories);
pre and postoperative course Table (1). All patients with isolated blow out fractures who can provide consent for participation were included. Only patients under 18 year old were excluded.

<table>
<thead>
<tr>
<th>Patient code</th>
<th>Gender</th>
<th>Age</th>
<th>Cause of fracture</th>
<th>Pre or postop.</th>
<th>BSV (binocular single vision test) score category</th>
<th>Injury and treatment course</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Female</td>
<td>24</td>
<td>Fall</td>
<td>postop</td>
<td>Low (0-60)</td>
<td>2 months</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>62</td>
<td>Fall</td>
<td>postop</td>
<td>Low</td>
<td>2(^\text{nd}) month</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>40</td>
<td>Work accident</td>
<td>postop</td>
<td>High (81-100)</td>
<td>2(^\text{nd}) month</td>
</tr>
<tr>
<td>4</td>
<td>Male</td>
<td>48</td>
<td>Assault</td>
<td>preope</td>
<td>High</td>
<td>2 days before operation</td>
</tr>
<tr>
<td>5</td>
<td>Female</td>
<td>48</td>
<td>Fall</td>
<td>postop</td>
<td>Low</td>
<td>30 days postoperatively</td>
</tr>
<tr>
<td>6</td>
<td>Male</td>
<td>45</td>
<td>Assault</td>
<td>postop</td>
<td>Low</td>
<td>1 day postoperatively</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>Age</td>
<td>Injury</td>
<td>Management</td>
<td>Severity</td>
<td>Time Period</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>7</td>
<td>Male</td>
<td>32</td>
<td>Assault</td>
<td>preop</td>
<td>Middle</td>
<td>within 2 weeks of injury</td>
</tr>
<tr>
<td>8</td>
<td>Male</td>
<td>22</td>
<td>Assault</td>
<td>conservative</td>
<td>High</td>
<td>within 2 weeks of injury</td>
</tr>
<tr>
<td>9</td>
<td>Female</td>
<td>40</td>
<td>Assault</td>
<td>conservative</td>
<td>High</td>
<td>3 weeks after injury</td>
</tr>
<tr>
<td>10</td>
<td>Female</td>
<td>22</td>
<td>Kicked</td>
<td>preop</td>
<td>High</td>
<td>6 weeks after injury</td>
</tr>
<tr>
<td>11</td>
<td>Male</td>
<td>26</td>
<td>Assault</td>
<td>preop</td>
<td>Low</td>
<td>one day preoperatively</td>
</tr>
<tr>
<td>12</td>
<td>Male</td>
<td>21</td>
<td>Assault</td>
<td>postop</td>
<td>High</td>
<td>6 weeks postoperatively</td>
</tr>
<tr>
<td>13</td>
<td>Male</td>
<td>19</td>
<td>Assault</td>
<td>preoperative</td>
<td>Middle</td>
<td>2 weeks post injury</td>
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<tr>
<td>14</td>
<td>Male</td>
<td>43</td>
<td>Assault</td>
<td>Conservative</td>
<td>High</td>
<td>5 days post injury</td>
</tr>
<tr>
<td>No.</td>
<td>Gender</td>
<td>Age</td>
<td>Injury Type</td>
<td>Treatment</td>
<td>Pain Level</td>
<td>Duration</td>
</tr>
<tr>
<td>-----</td>
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</tr>
<tr>
<td>15</td>
<td>Male</td>
<td>24</td>
<td>Sport injury</td>
<td>Preoperative</td>
<td>Low</td>
<td>1 week after injury</td>
</tr>
<tr>
<td>16</td>
<td>Male</td>
<td>24</td>
<td>Assault</td>
<td>Conservative</td>
<td>High</td>
<td>2 weeks post injury</td>
</tr>
<tr>
<td>17</td>
<td>Male</td>
<td>19</td>
<td>Assault</td>
<td>Postoperative</td>
<td>Low</td>
<td>2 months after 2nd surgery</td>
</tr>
<tr>
<td>18</td>
<td>Female</td>
<td>75</td>
<td>Assault</td>
<td>Postoperative</td>
<td>High</td>
<td>18 months after surgery</td>
</tr>
<tr>
<td>19</td>
<td>Male</td>
<td>55</td>
<td>Kicked by animal</td>
<td>Postoperative</td>
<td>Un assessed</td>
<td>3 weeks after surgery</td>
</tr>
<tr>
<td>20</td>
<td>Female</td>
<td>30</td>
<td>Assault</td>
<td>Postoperative</td>
<td>Low</td>
<td>4 weeks after surgery</td>
</tr>
<tr>
<td>21</td>
<td>Male</td>
<td>47</td>
<td>Assault</td>
<td>Postoperative</td>
<td>Low</td>
<td>More than one year after surgery</td>
</tr>
</tbody>
</table>
For reasons of validity and logistics semi-structured interviews were the preferred data collection method. They allowed an in-depth exploration of relevant issues with a singular individual. The privacy afforded by using interviews, we believe, allowed patients to be more open and willing to talk about what might be considered by some trauma patients as an embarrassing experience. The interviews took place in a hospital setting, at the participant’s convenience. One trained interviewer (FA) conducted semi-structured interviews with the whole sample using a flexible evolving topic guide. The initial topic guide was informed by expert opinion and research examining strabismus and diplopia (Hatt et al., 2007). Interviews were conducted until data saturation occurred, that is no new themes or ideas emerged from new data collected.

In this study a largely inductive approach was taken as little was known about the factors that might influence patients’ experiences of blow-out fractures of the orbit. Line by line coding was employed and data were organised using frameworks, in a case by case and theme by theme manner (Ritchie et al., 2004). The principles of constant comparative method (Glaser, 1965) were broadly employed to produce an inductive and iterative analysis of the data and two independent researchers were involved in the analysis of the data (FA & JD). In the following results, representative quotations will be used to support theory generated from the data. The patients’ details in the parenthesis following the quotation can be cross-referenced to Table 1.

**Results**

This section will highlight blow out fracture patients’ experiences and concerns throughout the treatment journey from the incidence of injury to the date of surgery. Accordingly, the emergent themes are presented in chronological order. The emergent themes are: immediate reaction to injury; concerns of emergent symptoms; differences in interpretation between patient and surgeon and quality of surgeon and patient communication.

**Immediate reaction to injury**

The patient’s reaction toward the blow-out fracture starts immediately at the time of injury, which in our sample resulted from an assault, fall, or sports injury. Patients often use the term “shock” to label the emotional impact of the initial trauma.

“The only thing I noticed, the initial impact, well the shock at first” (Case 9, Female, Aged 40, Assault).

It is not easy for a traumatised individual to describe the impact of trauma. This difficulty was more obvious in some patients, who at time of the interview, were still very affected by the incident and it was very current to them.

“It’s a hard thing to try and put into words what was going through [my] head. It’s more like I had the thought of why and the pain and trying to like not think about it at the same time. You know, it’s like my mind was all over the place really. It’s hard to focus on one thing.” (Case 16, Male, Aged 24, Assault).

“I don’t know, I don’t know. I don’t know if I was upset of the..., you know, thinking that I was in the wrong place at the wrong time, why did it happen to me, what’s going to be the outcome of this.” (Case 3, Male, Aged 40, Work injury).

This questioning may, however, not only demonstrate an attempt to make sense of what happened, but, also, might reflects the patient’s feeling that the trauma is unjustified or unfair. For the patient, this incident should have not happened and there must been something wrong to make it happen.

“This just didn’t need to happen. It didn’t need to be there, I didn’t need to have this worry. So that made us more frustrated and angry.” (Case 9, Female, Aged 40, Assault).

Other patients appeared unaware how serious their injury was. For these patients, the majority of whom were involved in interpersonal violence, getting punched in the face with the resultant swelling or black eye seemed to represent a mild soft tissue injury and an expected outcome after a blow. As explained by the patients this is why some of them did not seek immediate medical attention. With the appearance of unexpected symptoms, like diplopia, or facts, like the possibility of orbital fracture, the patient’s reported a realisation that it is not just a minor injury, or even a broken nose. It therefore becomes apparent to the patient that their injury is more serious than expected.

“to hit and having a kick in the face, having a black eye, you don’t expect so many complications of it, you know, to impact on you.... I was being told to man up, you’re only got a black eye, you’ll be fine. When I was actually walking around with a broken face. It was obviously a bit more complicated than I first thought it was just going to be.” (Case 10, Female, Aged 22, Kicked by accident)
Concerns of emergent symptoms

One of the emergent symptoms that patients reported made them question the nature and the severity of the injury was the occurrence or presence of diplopia. When they experienced double vision they explained the level of concern they had about the integrity of their vision. From the reports of the patients it would appear that they lack the biomedical knowledge about the nature of diplopia. They would appear to conceive diplopia, especially, complete double vision, as visual loss and a sign of eye damage. By using the term “eye” they are actually implying damage to the “globe” and subsequently their visual acuity (sight).

“Obviously that’s your worry initially, you know, have you really damaged the eye, the first concern was, you know, is my eyesight gone” (Case 4, Male, Aged 48, Assault).

The interview data showed potentially ineffective communication between the patient and the whole health care team throughout the patient’s journey with this injury. The patient-surgeon encounter represents no exception. The patient comes to the consultant clinic after an anxious waiting period with his/her concerns about the visual acuity.

“They said it looks like you’ve got an orbital floor fracture where your eye’s dropped. And I was just, you know, I thought it was … it’s obviously serious, you know, it’s not going to fix itself. And I was just … just felt vulnerable and obviously, you know, I can’t see properly. So it was a bit of a shock really.” (Case 11, Male, Aged 26, Assault).

“They said there’s a nerve that goes round there that controls this, goes through the floor or something. I don’t know, I’m not sure.

I said ‘I’m not going to lose my teeth then am I?’ They said ‘no.” (Case 20, Female, Aged 30, Assault).

Differences in interpretation between patient and surgeon

The clinical findings associated with blow-out fractures such as diplopia and enophthalmos, to the patient, are not merely symptoms of orbital wall fracture. The patient deals with each of these signs as a problem in his/her eye. They are not just functional or aesthetic problems, for the patient, these problems mean that there is damage in the eye. Similarly, when the patient has surgical emphysema, the patient tends to relate it to a problem within his eye.

“It looked like [my eye] was dead because it had barely any movement at all.” (Case 1, Female, Aged 24).

“...Because it is terrifying to know that my eye was sunk back in my head”. (Case 1, Female, aged 24, Fall)

“When I blow my nose the air’s come through into my eye. And then I was thinking ‘oh my goodness this might be a bit more serious than I think’. You know. (Case 9, Female, Aged 40, Assault).

Some of these patients’ visual concerns seem unrelated to the clinical facts dealt with by clinicians. Clinicians tend to deal with the clinical findings of this type of injury in a way that differs to how the patients perceive them. For example, the surgeon knows what the patient believes as a probable vision loss is an eye movement problem related to presence of orbital fracture and that the “sinking of the eye back into the head” is backward displacement of the globe (enophthalmos) due to an increase in orbital volume.

You’re hearing all this medical stuff but you don’t really understand what it’s all about.” (Case 10, Female, Aged 22, Kicked by accident).

Another aspect of patient’s experience with blow-out fracture is diplopia related impairment and activity limitations. The following quotes show the extent of this impairment as perceived by patients. As a result of visual impairment caused by diplopia, patients perceive diplopia as a serious visual problem.

“It’s difficult for anyone to imagine what it’s like and how it affects you. Because it’s almost like, you know, we all have, in our lifetime, some time or another have a cold, have a cough, a headache, vomiting, diarrhoea or whatever. But until you get really double vision, it’s very difficult to imagine what it’s like and also how it affects you. So … and I think that’s the difficulty is trying to get some of the understanding how double vision would affect you.” (Case 7, Male, Aged 32, Assault).

It has quite far-reaching implications, shall we say. It’s not just ‘oh that’s double vision’. (Case 5, Female, Aged 48, Fall). Visual impairment associated with diplopia was reported by our sample to have a major impact on their ability to work. It was difficult for some patients to pursue their jobs, whether manual or administrative, as most jobs require adequate degree of single vision.

“[As far as job concerned] your sight’s everything. (Case 16, Male, Aged 24, Assault)

 “[I had to leave the work] I was kitchen porter, washing dishes. I had to leave because I just couldn’t focus on anything,
couldn’t really wash dishes properly because I couldn’t focus on them good enough, so I just had to leave.” (Case 13, Male, Aged 19, Assault)

“I’m unable to see and I wasn’t sure … Am I going to be able to drive? Will I be able to work? Will I be able to play football? … Obviously I can’t work, can’t drive.” (Case 11, Male, Aged 26 Assault).

“I’m not driving yet because I’m concerned … if I was driving straight forward I’d be fine, but if I come to a Junction and I look both ways and then I get double vision then it’s not going to be safe for me to drive.” (Case 19, Male, Aged 55, Kicked by

Patients’ concerns over vision influence their decision about surgery. Their concerns are clearly expressed in some of the patients’ notion of having surgery on/in their “eye” and their uncertainty of the surgery’s potential effect on sight (visual acuity). These concerns around vision made the decision to undergo surgery more difficult, especially if they had only mild impairment or when surgery was indicated to prevent possible enophthalmos.

“I don’t know how I feel about that. But it’s a worry getting to have an operation obviously it is, particularly on your eye (Case 4, Male, Aged 48, Assault).

“Well obviously I’m thinking – operation – what for, how bad it is? What’s happened to my eye?” (Case 21, Male, Aged 47, Assault).

“I need my eye” (case 10, Female, aged 22, kicked by accident)

“I just always worried about my sight, more than the fact of how I looked. Do you know what I mean? I was more worried about how I could see than how I would look. I mean obviously I don’t want to look like a monster but, you know, I was more worried about my sight.” (Case 9, Female, Aged 40, Assault)

“Before surgery me eye was, I can’t even remember now, but I think it was just slightly up. That didn’t really bother us. The appearance side didn’t really bother us.” (Case 3, Male, Aged 40, Work injury)

The females in our sample, however, placed more emphasis on any enophthalmos than male participants due to what they perceive as an alarming difference of appearance between their eyes. This may be despite a good resolution in their diplopia post surgery.

“Especially pre-surgery, but to a certain extent post-surgery as well, it looked as though the whole eye and socket and everything had dropped. And – have you seen the film Quasimodo? You know, the Hunchback of Notre Dame? You know where he’s always portrayed with one eye up … I started calling myself Quasi. I honestly felt as though this eye was half way down that cheek and that was horrendous. The first time I looked in the mirror I thought ‘oh my god, no’. You know, that was a real shock.” (Case 5, Female, Aged 48, Fall)

“Clearly, unless I’ve got enough make-up on and my glasses, I do not look like me, I don’t look the same. But I did have quite a symmetrical face before. But now I don’t. My eye is further back than it used to be. … [My face] is not symmetrical anymore. … (Case 1, Female, Aged 24, Fall)

Taking into account the data presented thus far, it is possible to summarise patients’ interpretations of the biomedical problem or concepts underlying a blowout fractureThis summary is shown in Table (2).
<table>
<thead>
<tr>
<th>The biomedical clinical problem/concept</th>
<th>Patient’s interpretation of biomedical clinical problem or concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blow out fracture</td>
<td>Eye ball injury</td>
</tr>
<tr>
<td>Diplopia</td>
<td>Inability to see</td>
</tr>
<tr>
<td>Cause of diplopia</td>
<td>Unable to understand most of the time</td>
</tr>
<tr>
<td>Enophthalmos</td>
<td>Sinking of the eye in the head</td>
</tr>
<tr>
<td>Surgery</td>
<td>Surgery in the eye</td>
</tr>
<tr>
<td>surgical concerns over diplopia</td>
<td>Ability to see, ability to return to work,</td>
</tr>
<tr>
<td></td>
<td>ability to drive</td>
</tr>
<tr>
<td>aesthetic concerns over enophthalmos</td>
<td>Mostly not apparent (frequently enophthalmos is not very</td>
</tr>
<tr>
<td></td>
<td>evident preoperatively)</td>
</tr>
<tr>
<td>postoperative complications/findings</td>
<td>Not expected</td>
</tr>
<tr>
<td>(enophthalmos, lymphatic oedema, noticeable</td>
<td></td>
</tr>
<tr>
<td>surgical scar)</td>
<td></td>
</tr>
</tbody>
</table>
Quality of surgeon and patient communication

From the data presented it is possible to begin to comprehend how better patient understanding might help them to cope better with the outcome of the injury, especially with post-management problems such as residual diplopia. On the basis of our data, helping the patient to understand the difference between double vision and vision loss, from the beginning, might provide the patient with the early support they need.

“I felt confident as my vision is okay because the eye doctor gave me the impression that the vision itself, apart from there’s a bit of damage to my pupil. There might be a little bit of glare. But it’s the double vision. There’s nothing wrong with my eye itself, it’s the muscles around it and the movement needs lining up I think”. (Case 11, Male, Aged 26, Assault).

Discussion

Patients find it difficult to describe their immediate reaction toward traumatic incident. Normally, individuals assume a reasonably ordered and cohesive life path (Crossley, 2000). Trauma, by its nature, breaks this continuity (Tuval-Mashiach et al., 2004), hence the experience of trauma will disrupt the somehow orderly sense of existence (Crossley, 2000). In fact trauma has the power to confuse ordinary forms of comprehension, which makes trauma, somehow, incomprehensible and as if it belongs to another world (Belau, 2001). Frank (1997) illustrated that turning what is perceived as chaotic “unexpected” incident into verbal story requires the ability to distance yourself from the incident and therefore (re)gain the ability to reflect upon it.

It is suggested that trauma results in the loss of the sense of life’s map and destination for the traumatised individual (Frank, 1997b). This might be the reason behind the fact that some patients start to question “Why”. This questioning may reflect the patients’ attempt to rationalise their senses towards what has happened, and also their attempt at rebuilding the coherence of their life stories (Crossley, 2000; Taieb et al., 2010).

The concept of “sight damage” on behalf of the patients raises the issue of patient-physician communication and its role in improving patient’s health literacy and the treatment outcome (Barratt, 2008). It seems that there are still problems for some of the patients in our sample understanding the medical information they are given. It is possible that this difficulty relates to the use of medical terminology by health care providers as they communicate with patients who have inadequate relevant medical information. Failure of providing the patients with comprehensible information acts as a barrier to them understanding their problems (Williams et al., 2002).

In addition, what is reported to occur in the consultant clinic suggests that the nature of the conversation may not address patient’s concerns. The clinician usually follows a professionally and educationally determined course in communication with patients (history-taking), using closed ended questions, to reach the diagnosis. This form of questioning, which is common in medical , represents an interruptive conversation pattern. This interruptive communication pattern may not allow some patients to express their thoughts. Subsequently, unclear information might be provided by the surgeon during sharing the diagnostic information (Frankel, 2000). This can be seen in our sample from some patients’ lack of understanding and mixed emotions and reactions to the injury outcome.

Clinicians deal with this trauma and its related symptoms as a bony fracture that interferes with eyeball movement and/or position. Double vision and enophthalmos are signs of orbital wall fracture that warrant treatment, or as it is frequently mentioned in the literature as “correction”. As a result of these different views and patient’s lack of biomedical knowledge, or understanding of the injury, patients might find it difficult to relate their complaint with the fact presented to them by the surgeon, that they have an orbital fracture.

The level of concern about sight after the injury makes aesthetic concerns in the preoperative period less evident in comparison to the postoperative period. This is seemingly not only because any pre surgical aesthetic concerns are overshadowed by the concerns around visual ability, but also because enophthalmos would not be quite evident for most of our sample before undergoing surgery. This is because our sample were usually treated within two weeks of the incident and enophthalmos might require more than two weeks being clinically evident following resolution of oedema (Whitehouse et al., 1994).

Visual impairment related to diplopia, as perceived by patients, shows the impact and disabling consequences of the blow out fracture. The physical and psychological effects of blow out fractures may distract the patient and thereby negatively influence his ability to pay full attention to the medical information delivered (Rosenzweig et al., 1997). This will then interfere with the patient’s ability to relate the pure clinical facts provided by the clinician to their complaint. This may mean they have inadequate knowledge about the nature of their complaint and adequate patient knowledge about their condition is fundamental in order for the patient to be involved in making a choice about treatment options (shared decision making) (Kripalani et al., 2010) which tends to improve outcome (Edwards and Elwyn, 2005).
Physical limitation results from this injury and resultant fear of loss of employment, has been reported to be associated with higher psychological morbidity (Mason et al., 2002). It negatively influences patients’ feelings of accomplishment, control, independence, pride, and self-worth. These negative feelings, with the related financial burdens, might then contribute to depressive symptoms (Horn, 2009). Some of the physical limitations are directly caused through the diplopia caused by the injury and this diplopia also specifically interferes to varying degrees on patients’ ability to drive. In the United Kingdom Driver and Vehicle Licensing Agency (DVLA) medical questionnaire ‘V1’, states that an individual must be able to control or suppress the double vision to be eligible for driving (DVLA, 2010).

Effective and high-quality patient-surgeon communication is an important prerequisite for patient satisfaction and better outcomes (Lee et al., 2002; Suarez-Almazor, 2004). Our data suggest that in blow-out fracture management patients seemingly report a lack of adequate comprehension about the actual nature of the injury and the intended management outcome. It is imperative, given the patient’s reported perception of this type of trauma, to establish effective communication and provide clearer understanding for patients as otherwise both management and its outcomes maybe deleteriously affected. Establishment of early effective communication will provide early support for patient and help with coping process, which could prove to be crucial to outcome (Tuval-Mashiach et al., 2004).

The technical-medical form of the relationship usually adopted in patient-surgeon encounter can constrain the development of engaging patient-physician communication (Hall and Roter, 2007). The usual professional conversation in clinical setting, which is mainly based on specific clinical facts, might limit the clinician’s ability to address effectively the patients’ concerns. Clinicians might be unaware, sometimes, of the psychological attitude of patients with this type of trauma, which might influence the patients’ reaction toward the symptoms and the clinical facts provided by the clinician. Unclear understanding about the nature of the injury justifies more investigation about patient physician communication and shared decision making.

Effective physician-patient communication is an important prerequisite for patient to be able to become involved in making a choice about treatment options (Coulter et al., 2008; Kripalani et al., 2010). Increasing the patient’s involvement in decision making (shared decision making) also tends to improve outcome (Edwards and Elwyn, 2005). The available evidence suggests that true shared decision-making is not widely adopted. It seems that crucial information is inadequately expressed by physician and is equally as poorly comprehended by patients (Coulter and Ellins, 2005).

Charles (1999) identified 3 models of decision making in health care: paternalistic model, informed model and shared model. In the paternalistic model the patient submits to the professional authority of the physician, whereas the informed model involves a partnership between physician and patient. Here the physician provides the patient all the suitable information about the possible treatment options regarding the advantages and disadvantages, to enable the patient to make an informed treatment decision. In a shared model, on the other hand, there is shared agreement through all stages of decision-making and treatment decisions. Charles (1999) pointed out that in the real clinical world, the decision making process is some form of a hybrid model, due to the complexity and dynamicity of human nature and the personal nature of patient doctor relationship.

Providing patients with information leaflets about orbital trauma per se might be suggested to help the patient better understand some of the aspects of their injury. Such brief measures as decision aids may make it easier for patients to participate in shared decision-making (Thomson et al., 2007) especially where choices between conservative and surgical therapy are less than clear-cut.

Communication in general needs to be considered from both a context and cultural perspective. Patient-physician communication in this study provides an insight toward communication pattern within a certain health setting (UK general hospitals), and within UK culture. This pattern of communication might not, necessarily, similar to other health systems or in other parts of the world. This is one of the main limitations of this study and further exploratory research in other cultures/countries is required to identify whether the constructs identified within this study are present in other health care systems or cultures.

Conclusion

The main patient concern in blow out fractures of the orbit seem to be centred around the fear of losing vision, inability to work and inability to drive. This fear is related to the presence of diplopia which is perceived by the patient as a visual acuity problem. Inability to understand the reason behind this diplopia appear to be influenced by ineffective communication, which could negatively influence of management outcome.

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