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To
Swedish Agency for Health Technology Assessment
and Assessment of Social Services

Ethical analysis of traumatic shaking[1]

The Swedish National Council on Medical Ethics has conducted an ethical analysis of 'traumatic shaking' in connection with the Swedish Agency for Health Technology Assessment and Assessment of Social Services' report on the subject.

The Council has not undertaken any scientific assessment of the basic material. As such, the analysis is based on the Agency's results as presented in the report, which can be summarised as follows:

- "There is insufficient scientific evidence on which to assess the diagnostic accuracy of the triad in identifying traumatic shaking (very low quality evidence)."
- "There is limited scientific evidence that the triad and therefore its components can be associated with traumatic shaking (low quality evidence)."
- "The triad or its components can be attributable to causes other than shaking."

Outline

The analysis begins with an analysis of the term traumatic shaking. The rest of the ethical analysis is structured according to two dimensions. The first identifies the parties with an interest in the issue, and the second identifies the ethical values that come into play in connection with a possible shaken baby situation. Finally, the various crucial values are weighed up and the value conflicts that can arise in this process are considered.

[1] This is an unofficial translation of an ethical analysis performed by The Swedish National Council on Medical Ethics (Smer). In the translation process, some linguistic nuances may have been lost. To comply with the SBU terminology, Smer is using the term 'traumatic shaking' in this translation.

Conceptual problems

The term ‘traumatic shaking’ has been used in cases when the triad of subdural bleeding, retinal bleeding and various forms of brain injury are found in an infant. The Swedish Agency for Health Technology Assessment and Assessment of Social Services’ review of the scientific literature found limited scientific evidence that the triad and therefore its components may occur due to traumatic shaking, but it was also found that the triad or its components may also be due to causes other than shaking.

According to the Swedish Agency for Health Technology Assessment and Assessment of Social Services’ report, there is insufficient scientific evidence “to assess the diagnostic accuracy of the triad in identifying traumatic shaking”.

The doctor dealing with the family of the child with the triad may also have sources of information available other than those offered by medical imaging, neurological examinations and retinal examinations. There may be other injuries to the body that support the suspicion of abuse, or observations made in discussions with the custodial parents. It is an ethical requirement that all of this is considered in the doctor’s assessment before any concerns are reported to the social welfare committee.

The doctor has a duty to precisely describe everything that has emerged in the examination, both injuries that have emerged and the information that the custodial parents provide concerning the course of events and any other circumstances. It is also essential that all injuries are documented meticulously, both for medical professionals’ use and in case of future legal proceedings.

Every decision made by medical professionals, whether diagnostic or therapeutic in nature, is based on both fact and values. In this context, ‘fact’ refers to a description of all relevant findings made through physical, radiological, laboratory-based and other medical examinations of the child. However, it should be borne in mind that ‘fact’ may also include judgments, e.g. assessments of medical imaging findings. The next stage in the doctor’s work is to evaluate the medical findings and the substance of the custodial parents’ account of events. This is a different kind of task to the factual description. Here, the doctor has an important ethical responsibility to ensure that assessments are based only on science and tried and tested experience.

Parties

The starting point for the analysis is a scenario in which an infant, accompanied by one or two custodial parents, arrives at a health care facility with injuries that give rise to a clinical suspicion that abuse may be a cause of the child’s injuries. If the child’s injuries include the triad of symptoms and findings, the question of an eventual traumatic shaking arises. Already at this stage, there are several parties with a legitimate interest in how the situation is handled. These are the child, its custodial parents and various health care professionals. Where applicable, the child’s siblings may also be affected by the process. At a later stage, the situation may also involve social services staff and political officials (e.g. in the social welfare committee), as well as police, prosecutors and the judicial authorities at various levels.

Values

The child has a unique status in this situation due to various considerations based on ethical values. In this context we are talking about very young children. This means that the child itself is entirely incapable of explaining what has happened, and therefore cannot, for obvious reasons, safeguard its own interests. The injuries in question in situations in which traumatic shaking is suspected may be serious in nature, both in acute terms and also in the longer term. The injuries may be life-threatening, or entail a risk of permanent consequences in terms of the child's development, health and future quality of life.

For these reasons, an ethical analysis of traumatic shaking should be primarily based on a child perspective. The key ethical question is how the child's interests can best be safeguarded, as it can never be acceptable that a young child is subjected to abuse.

It is an ethical duty that the young, unprotected child's interests are safeguarded by somebody else. It would normally be the duty of the child's custodial parents to safeguard its interests. In a situation in which traumatic shaking is suspected, however, it is often one (or both) of the custodial parents who may have caused the injuries. This means that they may not have discharged their parental responsibilities.

In the scenario outlined here, the immediate responsibility for safeguarding the child's crucial values falls to the medical professionals dealing with the family at the hospital. In such situations, staff must act based on their professional ethics and applicable legislation.

The first step may be taking vital, acute medical measures required by the child's state of health. All necessary medical measures must be taken to remedy and alleviate the child's acute injuries and prevent future after-effects. Naturally, this is the top priority in handling the case.

If the suspicion arises that the injuries may have occurred due to violence, it is the doctor's duty to investigate this suspicion on the basis of science and tried and tested experience. It is also the doctor's duty under Chapter 14, Section 1 of the Social Services Act (2001:453) to report to the social welfare committee any suspicions of risk of harm to the child.

Society has an explicit responsibility to protect children in a number of respects. This is clear from various laws, including the Social Services Act and the Care of Young Persons Act (1990:52). The former provides opportunities for society to intervene in consultation with the custodial parents, while the latter provides opportunities for society to take measures to protect the child without the custodial parents' consent. As a last resort, the social welfare committee can take the child into care outside the home.

The Convention on the Rights of the Child, which is currently being incorporated into Swedish law, outlines a number of fundamental rights enjoyed by all children, including the right to protection of their life and health, the right to grow up in good conditions and the right to good care. The Convention was drawn up based on a rights perspective, but it also rests on central ethical principles of adult society's responsibility for children's life situation, to protect what are crucial values for all children.

When a doctor asks a child's custodial parents whether the child's injuries may have been caused by some external event of which they are aware, it is uncommon for them to admit it immediately (Lowenstein 2004). In this situation, it is important that the doctor does not take on the judicial system's role of determining whether an offence has taken place or accusing a particular individual.

The custodial parent(s) has/have a legitimate interest in ensuring that certain values that are crucial to them are considered in the situation. These include the right to good care, which the custodial parents are generally anxious to ensure regardless of the cause or any intent (Leuthner 2001). Moreover, it is an important value for them that they are listened to adequately and that the hospital's handling of the situation has an impartial and unbiased starting point with respect to all conceivable causes of the injuries observed.

For medical staff, it is a crucial value to be met with respect for their professional duties from both a medical and an ethical perspective. It is usually the doctor who is responsible for assessing the likelihood that the injuries observed in the child may have been caused by an adult, usually one of the custodial parents, and thus could be a sign of traumatic shaking. For the doctor, it is of considerable value to be allowed space to consider the decision of whether or not to report any concerns. A decision to report is associated with considerable consequences for both the child and the custodial parents, and must therefore be well-founded and well-considered. Such a decision should always be taken in consultation with at least one other doctor.

The doctor also has an interest in having sufficient training and expertise in the area of child abuse to be able to handle these ethically and psychologically very difficult situations in a professional manner.

Social services have a radically different division of responsibility compared to medical professionals. The decision-making mandate for measures without custodial parents' consent rests with the political officials in the social welfare committee, represented in urgent situations by their delegated chair. The basis for the decision is, however, produced by social services staff. They have professional ethical rules for their work that must be taken into account in situations of this nature. For social services staff it is a crucial value to safeguard the child's interests and protect the child from threats to its life, health and development. It is a crucial value for social services that the information that they receive from medical professionals is medically correct, well-founded and formulated in such a way that conclusions about the cause of injuries observed are not reported without a solid basis.

If the case – immediately or at a later stage – is subsequently transferred to police, prosecutors and courts, those authorities will have a similar interest with respect to information from medical professionals. If and when a case comes to court, it is important for the court to have access to scientific expertise to express an opinion in accordance with the professional ethical principles and applicable legal rules concerning certificates and opinions.

Value conflicts

There are several significant value conflicts with respect to traumatic shaking. One of the most important concerns whose interests should take precedence – the child's or the custodial parents'. From a child perspective there cannot be any doubt that the child's interests have the highest priority in several respects. Firstly, the child needs to have its injuries examined and treated professionally and competently in a medical setting. If it is suspected that the injuries may have been caused by abuse, there is an additional obvious need for protection of the child's life and health.

On the other hand, the custodial parent(s) suspected of shaking a child has/have a legitimate interest in not being condemned when innocent. Here we see a potential value conflict that can be described as an ethical dilemma in the sense that there is no entirely problem-free solution.

This dilemma can also be expressed in terms of the risks of underdiagnosis and overdiagnosis. Underdiagnosis refers to children who really have been subjected to shaking not being identified and thus not receiving society's protection against further abuse or growing up in conditions that are otherwise inadequate. Such underdiagnosis may occur due to a lack of competence or vigilance among medical professionals, or a lack of willingness or ability to investigate suspicions of traumatic shaking in a professional manner.

Overdiagnosis may occur if doctors who encounter children presenting the diagnostic triad immediately assess this as evidence that shaking and shaking alone is the cause of the injuries observed. This is thus a matter of confusing a hypothesis of a possible cause for a child's injuries with a claim of certain knowledge that there is such an unambiguous and certain link between cause and effect.

This process thus creates a risk that the continued treatment in such a case will mainly be characterised by a 'validation strategy' (Melzer et al, 2013). This means that further measures are taken purely to confirm the hypothesis, and that insufficient account is taken of information that could disprove the hypothesis.

Both under- and overdiagnosis are extremely problematic from an ethical point of view. Overdiagnosis protects many children, both those in whom traumatic shaking is established as cause and a number of others. Nonetheless, it leads to families being split up, some of them on false premises. Separating children from their custodial parents is a serious intervention that should only be implemented when a child runs a clear risk of abuse at home. The fact that other children in the family may be taken into care may further exacerbates the situation.

The value conflict outlined above between the interests of the child and the custodial parent(s) needs to be related to the legal principle that no innocent person should be convicted of a crime. Overdiagnosis of traumatic shaking results in a number of children being protected, some of whom really are victims of such shaking, but this is at the expense of a number of custodial parents being deprived of their liberty without having committed an offence. However, underdiagnosis of traumatic shaking leads to children who are being mistreated remaining in a harmful home environment, at risk of future acts of violence.

The medical controversy that has surrounded traumatic shaking in Sweden and around the world is largely about whether there is established scientific support for the claim that the symptomatic triad of subdural bleeding, retinal bleeding and brain injury is caused by shaking and shaking alone. The Swedish Agency for Health Technology Assessment and Assessment of Social Services' report shows that there is scientific evidence – albeit limited – for the idea that the triad may be caused by shaking, but that there are other illnesses and events that can cause the triad or its constituent parts.

This raises the question of when doctors can and should express an opinion when it comes to traumatic shaking. Ethically, it is particularly important that doctors and other medical professionals are observant with respect to injuries in young children that could conceivably have been inflicted by human hands, even if the custodial parents deny anything of the sort. The clinical examination and treatment of injuries must be entirely robust. The question is whether a doctor can express an opinion about the cause of the observed injuries with scientific certainty at a later stage. The doctor has, as previously outlined, a range of different information to take into account when assessing the possible causes of the injuries. To state on the basis of the mere existence of the triad that it was definitely caused by shaking must, however, be considered incompatible with both doctors' professional ethics and the regulations concerning legal certificates (Albert et al, 2012).

This observation does not mean that there cannot be grounds to report concerns in spite of this uncertainty, as the child's need for protection is a broader issue than the question of the cause of the injuries.

Conclusions

The Swedish National Council on Medical Ethics has based this ethical analysis on the observation in the Swedish Agency for Health Technology Assessment and Assessment of Social Services' report that scientific evidence concerning traumatic shaking is limited. There is limited scientific evidence that the 'triad' of symptoms or its constituent parts may occur due to shaking, but the report states that there are differential diagnoses that can also cause the three symptoms/findings in the triad.

The Council considers that it is ethically problematic for medical professionals to establish with certainty that certain specific injuries in infants are automatically evidence that they were caused by shaking. Such overdiagnosis of traumatic shaking should not occur when the state of scientific knowledge is so limited (Riggs & Hobbs, 2011).

The Council also considers that underdiagnosis is ethically problematic, in the sense that it means that children who really have been subjected to shaking are not identified and examined by medical professionals. This risk can, however, be limited through improved professional training on child abuse in general and traumatic shaking in particular, within both health care services and social services.

The Council would like to emphasise the importance of medical professionals observing their duty to report to the social welfare committee cases in which it is suspected that children have been mistreated in any way. This is particularly applicable in cases where any kind of child abuse is suspected. Medical professionals must be able to combine high vigilance of suspected traumatic shaking with caution with respect to expressing an opinion on the cause of the injuries observed, since the state of scientific knowledge does not permit any clear conclusions in this area.

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On behalf of the Council,

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