

never achieve their intended aim. This is an extremely difficult concept to prove. No agreement has been reached as to whether a specific chance of survival equates to futility. For example, to some people this may mean a 1% chance of survival and to others a 0.1% chance. As a result emphasis is moving towards assessing the likelihood of person surviving to intensive care, or hospital discharge, whilst taking into account the risks or burdens of the treatment.

Ethically there is no distinction between withholding and withdrawing a mode of therapy. When a therapy is not considered to offer any benefit there is no obligation to institute it. Equally if a therapy fails to produce the intended beneficial effect then it should be stopped. Continuing every treatment, just because it had been started, would expose patients to the potential side effects of multiple treatments without expectation of benefit (5). This introduces the concept of ordinary and extraordinary means. Ordinary means are taken as those therapies that have a reasonable expectation of benefit with little or minimal burden. Extraordinary means are those involving excessive pain or distress. Differentiating ordinary from extraordinary treatment is problematic, as the terms have also been used incorrectly to refer to simple versus complicated treatments. More useful terms are proportionate and disproportionate as they reflect the relationship between the treatment and its effect upon the patient. Under differing circumstances the same intervention may be either proportionate or disproportionate. Whilst there is a duty to offer proportionate treatment there is no such obligation to consider the use of interventions thought disproportionate.

### *Acts and Omissions*

It is permissible to withhold or withdraw treatment even if this allows the disease process to progress to a natural death for the patient. There is an important distinction between letting something happen (permitting an illness to progress naturally) and making something happen (acting intentionally). Any decision to withhold or stop therapy should be based upon the expectation that the patient cannot benefit from that treatment. When withdrawing treatment the clinician's intention must be to relieve the person of the burdens associated with that treatment. Although it may be foreseeable that the person may die as a result it should not be the intention.

The case of Karen Quinlan in the USA demonstrates the issues involved. As a result of severe brain injuries Karen was left on a ventilator in a permanent vegetative state. It became obvious that she could not recover so her parents requested that ventilation be withdrawn. It was foreseeable that following this she may not have been able to breathe adequately for herself and so would die. When ventilation was discontinued, to everyone's surprise, she was able to breathe spontaneously

and continued to do so for nine more years.

### ***Principle of Double Effect***

In the intensive care unit there is an obligation to maximise comfort and minimise pain or distress. This may even be the most important aspect of care. This duty continues even after a decision to withdraw treatment. Drugs such as opioids and benzodiazepines are often administered with this aim. These drugs have an intended beneficial effect (such as reduced distress) and also harmful side effects (such as respiratory depression). The side effects may actually appear to precipitate the patient's death hence the apparent double effect of such drugs. It is the intention behind their use that is of paramount importance. Providing the intended effect is to relieve pain or distress, and the dose titrated with this in mind, then their use cannot be successfully criticised. Equally there is an obligation to provide a sufficient amount of the drug to achieve its beneficial effect – only half treating a patient's distress is cruel. Should, however, the sole intention of administering the drug be to bring about the death of the patient then the doctor might be charged with murder.

### ***Ethics committees and medical education***

The General Medical Council, the British Medical Association Ethics Committee, as well as the various Royal Colleges provide guidance on healthcare related ethical issues. Generally they publish guidance on a variety of areas but do not provide advice on individual cases (6)(7). Individual difficult ethical decisions often receive extensive media coverage (8)(9). Ethics committees in UK hospitals are mainly Research Ethics Committees and have no role in clinical ethics. In contrast, Clinical Ethics Committees, as found in many hospitals in the United States, are gradually appearing throughout the UK (10). There has been no rigorous assessment of the effectiveness of Clinical Ethic Committees in resolving ethical problems.

### ***Religion***

Christianity is the major religion of the UK and Europe. Both the Protestant and Roman Catholic churches accept that treatment may be withheld or withdrawn when indicated. Individuals may, however, have differing opinions based on their personal religious beliefs.

### ***Legal***

The legal situation in the UK and throughout Europe regarding withdrawal or withholding of treatment is fairly uniform. The case of Tony Bland in England illustrates this well and is probably one of the most notable in recent years. Tony Bland suffered severe brain injuries due to hypoxia. After 3 years it was clear that he was in a permanent vegetative state and would

not recover. His family approached the court asking that the artificial hydration and nutrition which was keeping him alive be stopped. His case eventually reached the House of Lords, the highest court in the UK. The decision by the Law Lords was based upon whether Bland's interests were best served by continuing or stopping treatment. It was accepted although treatment was originally started in Tony Bland's best interests all hope of recovery had now receded. As a result his best interests in being kept alive had also disappeared (11)

### *Basis of decision*

The decision making process at the start of Intensive Care is relatively simple. At this stage treatment is aimed at improving the patient's physiological condition and underlying acute pathology. This presents no significant ethical difficulties as it is presumed to be in the patient's best interests to attempt to treat. It is also relatively simple in legal terms as the patient may have been able to consent to this treatment. Even if the patient, because of his condition, is unable to consent treatment is permitted by legislation in Scotland (12). There are instances when patients referred for admission to intensive care are not admitted because the likelihood of benefit is small or nonexistent. This decision is based on the underlying pathology, the acute condition, and is discussed with the referring medical team, the patient and the patient's relatives as well. This is based on the ethical principle that in order to provide treatment there should be at least a presumption of potential benefit (beneficence). In this situation that is absent and there is only the possibility of harm (maleficence).

The ethical dilemma develops when a patient does not respond to the therapies provided. Although all patients should be admitted with the expectation that they may improve, a significant proportion do not. Discussions occur between the medical staff and with the patient's relatives. Although it is possible to provide approximate chances of survival at the onset of intensive care these estimates apply to groups and not to individuals. Over time it becomes clearer whether the patient is likely to survive or not.

Those deemed to be nonsurvivors fall into three distinct groups. The clearest group are those who continue to deteriorate despite increasing levels of support. These patients will die soon even if full intensive care support is continued, or even escalated. The second, but more numerous, group is characterised by patients who require high levels of support but are neither deteriorating nor improving. A further distinct group of patients are those that ultimately require a low level of support, usually respiratory, but are unable to become independent of intensive care. Each group poses different ethical questions.

Patients that are deteriorating despite escalating support do not present an ethical dilemma. If it is impossible to reverse the acute pathological process and they are dying despite full therapy the decision making process is simple. If it is agreed that the patient is dying then there are only two options available. The first is to continue to treat with the expectation that the patient will die. The alternative is to withdraw or withhold active therapy whilst continuing all comfort care measures. Ethically there is no problem stopping because where the treatment cannot achieve its intended outcome then there is an obligation to stop it.

Decisions are more difficult in the situation where the patient requires high levels of support, is not deteriorating, but the underlying pathology has not resolved. In these circumstances it is mandatory that an assessment is made of the possible benefits to the patient of continuing these high levels of support. Providing there is judged to be no realistic expectation of recovery then the same ethical principles apply. Under certain circumstances a decision may be made to withhold or withdraw even though the patient is not actually dying at that time. This occurs because it may not be in that patient's best interests to continue. It may be that although recovery to extent of no longer requiring organ support could eventually be achieved, the chances of having an acceptable quality of life following intensive care are remote. This can occur if the severity of underlying chronic co-morbidities was unknown or underestimated at the time of admission to ICU.

The third group present a considerably greater challenge. These patients appear stable on minimal support but are requiring a very prolonged period of intensive care. It is often very difficult to be certain that continuing therapy will be beneficial. In this situation it is most important to determine what the patient's wishes would have been. The underlying ethical principles here are autonomy and non-maleficence. These courses of action also are supported by a survey of critical care clinicians who ranked continuing organ failure or deterioration, a failure to improve and the patient's prognosis as the most important considerations in deciding to continue, withhold or withdraw treatment (13).

Occasionally the patient may be able to communicate their wish that no further active measures are desired. In that case the clinician must respect the autonomy of the patient and continue comfort care but cease all active interventions. There is no legal issue with this course of action as to continue treatment that the patient has refused would be assault. Unfortunately, communication with the patient is not usually feasible. Therefore a number of factors need to be considered such as the person's previously expressed wishes, post intensive care quality of life and the reversibility of the residual organ dysfunction. Although advance directives, which

record a person's treatment wishes, are supported in law very few people have actually prepared one (14). As a substitute we often ask the relatives to give their opinion regarding the patient's wishes. There are limitations with this as it is known that the relatives may, despite their best intentions, not be accurate about the patient's wishes as they believe or even be aware of their role (15)(16). It therefore becomes the clinician's duty to determine the patient's "best interests". This has some similarities to the traditional paternalistic approach. The significant difference being that some effort to determine the patient's wishes must be made. The actual decision as to what is in the patient's "best interests" will be influenced by their previous action, the relatives, carers and information from their family physician.

### *Documentation*

The General Medical Council, the regulatory body for doctors in the UK, recommends that prior to any decision being made regarding the futility of treatment that the issues are fully discussed and documented. This should include the senior medical and nursing staff of the ICU as well as the referring medical team. It is important that the reason for considering therapy to be futile is established. Sometimes this is relatively simple if there is an evidence base that can be applied directly to this situation. An example would be persistent coma with the absence of pupillary, corneal and motor responses at 24 or 72 hours following cardiac arrest. Unfortunately, such clear cut conditions are unusual. The diagnosis, other co-morbidities, prognosis and response to therapy all have to be considered before a final decision is made. This is not as precise as using a defined evidence base. It is, therefore, our practice to insist that there is unanimity amongst the consultant staff before a decision to withhold or withdraw therapy can be made. Should any member of consultant staff not agree then treatment is continued. Such an approach is consistent with the advice of the regulatory bodies in the UK (6,7). It must be recognised that at times a group may benefit from some impartial advice from colleagues from other units.

### *Our Practice*

Once a decision that the patient will not survive intensive care our first priority is to ensure the continued comfort of the patient and the family. This is consistent with the ethical principles of non-maleficence and beneficence.

The next decision is to whether there should be a limit on treatment or a withdrawal of treatment. Although in principle withdrawing of treatment would be the most consistent with the ethical principles this may not be the most practical approach. Sometimes the family needs time to come to terms with these decisions. There may also be practical issues such as the

imminent arrival of other family members who wish to visit before treatment is stopped. Indeed there is evidence to suggest that even when a patient's death is sudden and unexpected that the family wish to be present. As most critically ill patients are on multiple organ support the mode and level of support affect how therapy is withdrawn. In our practice the majority of patients receive ventilatory support and therefore curtailment of this is a usual feature of treatment withdrawal. Because of the sophisticated ventilators in use very few patients receive muscle relaxants to facilitate ventilatory support. We are therefore withdrawing high levels of support in patients that can breathe for themselves. This avoids the controversial practice of removing ventilatory support from a paralysed patient in whom the use of muscle relaxants which would make death inevitable. This could be interpreted as intentionally killing the patient. It is our practice to remove both the high levels of oxygen and positive end expiratory pressure. Distress from dyspnoea may be minimised by either maintaining some ventilatory support or by using drugs such as opioids. Should the patient not be distressed we may then remove the respiratory support and extubate. A high proportion of our patients also receive inotropic and vasopressor support. As withdrawal of these drugs is associated with hypotension but not distress we normally discontinue them. Renal support is also stopped. In addition other interventions such as antibiotics are discontinued.

The major controversies concerning withdrawal of support where treatment is considered futile occur when the patients are not receiving the levels of organ support that characterise a typical intensive care patient. In this situation the only supportive therapy that can be stopped is the artificial nutrition and hydration. This situation could arise in the ICU, a ward, or even in a nursing home. The current recommendations are that Court's permission to stop is sought prior to any decision is implemented. This helps to resolve any conflict between the clinicians and the relatives, or where the family and clinicians are in agreement it protects the clinicians from any accusation of wrong-doing.

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### 心肺蘇生に関する決定について

British Medical Association

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"患者は自らの望む治療やケアを決めるために、質の高い情報を必要としている。私達は、患者が治療について決めるときと同じように、蘇生するかどうかについて決めることができるよう望んでおり、その決定をサポートしてくれるこのパンフレットを歓迎している。"

ウィリアム ドナルドソン卿、チーフメディカルオフィサー  
サラムラリー・チーフナーシングオフィサー

このパンフレットには以下のことが説明されています。

心肺蘇生とは何か

自分に心肺蘇生が必要かどうか、どうやって知るのか

心肺蘇生に関する決定はどのようになされるのか

このパンフレットは一般に患者さん向けですが、家族や友人、介護者などにも参考になります。ここでは、心肺蘇生についてのすべての質問や疑問を解決することはできないかもしれませんが、この問題について十分に検討するのに役立ちます。もしさらに質問がありましたら、医療従事者（医師、看護婦など）にご相談ください。

#### 心肺蘇生とは？

心肺停止とは心臓と呼吸が停止するということです。そんなことが起きた場合、時々心肺蘇生という緊急治療で、心拍と呼吸を再開することができます。

心肺蘇生には 心臓マッサージ（胸を何度も強く押すこと）  
電気ショックで心拍を再開すること  
人工呼吸（口の上からマスクをしたり、器官にチューブを入れたりして、肺に空気を入れること）などが含まれるかもしれません。

### 心肺蘇生は心肺停止した人に必ず行われますか？

例えば重大なけがをしたときや、心臓発作が起きた時など、心拍と呼吸が突然停止した場合、心肺蘇生が効果的である可能性があると考えられたら、医療従事者は心肺蘇生を行います。しかし、心臓停止や呼吸停止は自然の死の進行でもあります。とても重い病気で人生の終わりにある方たちには、心臓と呼吸が停止するたびに心拍や呼吸を再開させる措置をとることは、何の利益にもならないかもしれません。ほかの疾患があるため、残りわずかの余命である患者様は特にそう考えられます。そういった場合、心拍と呼吸を再開することによって、痛みや苦痛を長引かせてしまうこともあります。

### 心肺蘇生をしたら正常の状態に戻りますか？

人それぞれです。中には完全に復活する人もいれば、復活はしても何らかの病気をもつひともあります。しかしながら、心肺蘇生のほとんどは成功しません。それは心臓と呼吸が停止した理由と患者様の健康状態、そして心臓と呼吸を再開させるのにかかる時間によって違います。復活された方でもまだとても病状が悪い場合が多く、冠動脈疾患集中治療室や集中治療室でさらに治療を受ける必要があります。心肺停止の前の健康状態、精神状態に再び戻れない人もいます。脳損傷や昏睡状態になる人もいます。多数の病気を持たれている患者様については、完全な復活をする可能性はより低いです。心肺蘇生に使われる技術そのものからの副作用（例えば打撲傷、肋骨骨折、気胸など）もあります。

### 私が心肺停止になる可能性は？

担当の医療従事者に相談するのが一番良いでしょう。同じ症状を持つ人でも必ず同じ病気を持つとは限りませんし、同じ病気でも症状や病状は人それぞれです。心肺停止がもし起こった場合のことを医療従事者と患者様と一緒に前もって検討することは大切なことです。担当の医療従事者（多分医師）が、病気のこと、これからの進行の見込み、そしてそれに対する手段について相談に応じます。

### 私が心肺停止になった場合、心肺蘇生の成功率は？

成功率は、心臓と呼吸が停止した理由、現在（または過去）の病気、そして全体的な健康状態によって変わってきます。全体として心肺蘇生が行われる人のうち40%は心拍と呼吸の復活に成功します。平均10人のうち2人は退院できます。重病者の率はさらに低いです。しかしこれは全体像であり、あなた個人の状況を正確にあらわしているわ

けではありません。個人差があるので、担当の医師があなたにとって心肺蘇生はどのような効果があるのか説明してくれるでしょう。

私の年齢、あるいは障害を持っていることと、心肺蘇生をするかどうかの判断とになんらかの関係がありますか？

いいえ。大事なものは（健康状態  
あなたの希望  
医療従事者がその希望にこたえられる見込み健康状態）です。

年齢や障害は直接判断には影響しません。

心肺蘇生の決定は誰がするのですか？

患者様と医師両方で心肺蘇生の決定をします。担当の医療従事者は、心肺蘇生の成功率や効果が続く期間の推定など、すべての医療に関する問題を把握しています。もし心肺蘇生によって質のよい生活が送れるとしたら、心肺蘇生は有利なことでしょう。しかし、心肺蘇生によって身体障害を受ける場合や、苦しみを延長することもあります。そんな状況のなかでの延命は必ず有利なこととはいえません。心肺蘇生の判断をするとき、あなた自身の意見がとても大切なので医療従事者に伝えてください。もし望むようでしたら、友人や家族の方々も相談に参加することが出来ます。もし患者様と医師とのコミュニケーションがうまく取れていれば両者とも納得するような治療判断ができます。

もし決定をしたくない場合は？

もし心肺蘇生の相談をしたくないのなら、する義務はありません。もし今現在の時点で心肺蘇生の話は早すぎると考えられる方は、また改めてほかの時に相談することも可能です。家族や友人、介護者などの意見も参考になるでしょう。自己決定をしたくないのなら、医師が患者様の意見を参考に心肺蘇生の決定をします。18歳未満の患者様の場合、親に決定権力があります。

もし決定をしていない状態で心肺停止になったら？

< England, Wales and Northern Ireland >

担当の医師が決定します。家族や友人の話は参考になりますが、最終決定権力は医師に

あります。相談して欲しい、またはして欲しくない方がいらっしゃったら、医療従事者にお伝え願います。

### <Scotland>

成人はもし自分自身で決定が出来ないときに、弁護士を通して、代わりに決定する代表者（代理人）を決めることが出来ます。代理人を正式に決定していなければ、担当の医師が心肺蘇生の決定をします。家族や友人の話は参考になりますが、最終決定権は医師にあります。相談して欲しい、またはして欲しくない方がいらっしゃったら、医療従事者にお伝え願います。

#### 心肺蘇生をされて欲しくない并希望してる方

医療従事者は必ずあなたの希望にお答えします。その意思を文章で残したいのならばリビング・ウィル（生前遺言）を作ることも可能です。リビング・ウィルがあるのならば医療従事者に知らせ、カルテの中に入れるようにしてください。身近の人にも知らせることもお勧めします。

#### 心肺蘇生をしないと決定した後は？

医療従事者はベストのケアを続けます。担当の医師は（患者様の反対がない限り）心肺蘇生の判断を医療従事者、友人や家族に知らせます。'心肺蘇生をしないとカルテに書きこみます。これは 'Do not attempt resuscitation' (DNAR) とも言います。

#### ほかの治療への影響は？

DNAR は心肺蘇生だけに該当するものであり、ほかの治療にはまったく影響ありません。

#### 心肺蘇生を希望するのに医師に成功の確率がないといわれてしまったら？

成功しない治療を指定する権力は誰にもありませんが、もし本当に成功する可能性があるとしたら、心肺蘇生を否む医師はいないでしょう。心肺蘇生の成功率に疑問があるようでしたらセカンドオピニオンを得ることもできます。心肺蘇生によって心拍と呼吸が戻っても、その後重い病状や障害が残されるなら、そのリスクも考えにいった上、よく検討する必要があります。医療従事者や身近の人（相談に参加して欲しいのならば）は必ず患者様のご希望を聞きます。

### 状況が変わったとしたら？

心肺蘇生に関する決定は患者様のご希望の変わりや病状の変化に沿って定期的に再検討します。

### 翻意したら？（気が変わったら）

いつでも翻意できます。医療従事者によく話し合ってください。

### 自分のカルテを見ることはできますか？

ご自身の記録は読むこととコピーももらうことは、法律上できることになってます。医療従事者は心肺蘇生に関する決定をカルテに記録します。ご覧になりたいときは医療従事者におっしゃっていただければ、見せてもらえます。わからないことがあったら、スタッフに聞いてください。

### ほかに相談できるひとはいますか？

カウンセラー、牧師、サポートグループ などがいます。

もし医療従事者との相談が不完全だった場合、納得いかなかった場合は。。。。に連絡してください。意見や不満、心配事の相談にのります。

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