

DIE VERVOER VAN BESEERDE PASIËNTE

Een van die groot moeilikhede by die behandeling en bevredigende hantering van ernstig beseerde pasiënte, is die groot afstand tussen hospitale. Alhoewel ons paaie, wat van jaar tot jaar verbeter, tot ons skat van skoonhede in die land behoort, vorm hulle ook 'n bron van groot bekommernis aangesien jaarliks meer en meer padongelukke voorkom—'n toestand van sake wat saamhang met die verbeterde padoppervlaktes en die kragtiger motors wat in steeds groter getalle beskikbaar word. 'n Motorongeluk in die stad is ernstig genoeg—op die platteland is trauma as gevolg van jaery dikwels noodlottig. Dit is bekend dat ongelukke op die platteland dikwels ernstiger is as in die stede—'n toestand van sake wat weerspieël word in die groter sterftesyfer na ongelukke: 2% in stedelike gebiede teenoor 12% onder vergelykbare omstandighede op die platteland.

Die sleutel tot goeie behandeling van beseerdes lê ongetwyfeld in goeie vervoerreeëlings. Daar is ooreenstemming by militêre en siviele otoriteite dat, as alles in ag geneem word, beter resultate met behandeling van beseerdes verwag kan word as die beseerde persoon so gou as moontlik vervoer word sodat hy bevredigende mediese en verplegingsbehandeling kan ontvang. Die daaropvolgende ongeskiktheidsperiode kan ook hierdeur verkort word. Selfs goeie vervoer en versigtige hantering kan egter nie voorkom dat bykomstige besering ontstaan nie. Dit is dus noodsaaklik dat daar versigtig besluit moet word oor die relatiewe voor- en nadele van onmiddellike vervoer of opwekking op die plek van die ongeluk.

Dit is hier—by die vroeë en noodsaaklike opsomming van die geval—dat die geneesheer toon wat hy beteken. Die medisyne bly nog 'n kuns, en dit is by hierdie belangrike besluite dat opleiding en ondervinding die meeste tel. Alhoewel die besluit gou geneem moet word, laat goeie eerstehulp-maatreëls tog ruimte vir speling. As die essensiële voorwaardes van 'n oop lugweg en beheer van bloeding dus nagekom is, kan daar 'n verposinkie wees waarin om te besluit of dit in die beste belange van die pasiënt sal wees om hom dadelik te vervoer of nie. Daar is nie baie maatreëls wat as roetine vir alle gevalle toegepas kan word nie—as dit anders was, sou behandeling deur persone sonder spesiale opleiding onderneem kon word. Die groot verskeidenheid van omstandighede by elke ongeluk en die individuele variasies sal nog lank voorkom dat ons robot-praktyke in hierdie gevalle toepas.

Sodra die besluit geneem is om die pasiënt te vervoer, moet die 'gladste' metode gebruik word. Oor kort afstande van 'n paar myl of so is die gewone motorambulans heeltemal doeltreffend. As die afstande egter groter as 30 of 40 myl is, tree die nadelige gevolge van dié soort vervoer te voorskyn, en die bloeddruk van die pasiënt daal na gelang sy toestand van skok vererger. Terwyl ons dus skaars iets beters kan bedink as motorvervoer in die stede

en omstreke, moet ons spesiale aandag skenk aan die verbetering van vervoerdienste op die platteland.

Miskien sou vervoerdienste oor afstande van 30-100 myl op die beste manier gereël kon word deur gebruik te maak van helikopters—indien so 'n diens beskikbaar gestel sou kon word. Die beseerde kan dan na die naaste hospitaal vervoer word waar opwekking en behandeling onderneem kan word op die grondslag van bestaande en aanvaarde beginsels.

Wat met die pasiënt gebeur nadat hy na 'n hospitaal toe vervoer is, hang in 'n groot mate van regeringsbeleid af. Tot onlangs is dit aangeneem dat alle hospitale ewe goed toegerus is om mediese en verplegingsdienste te lewer aan beseerdes. Daar word nou egter al meer besef dat alle hospitale nie ewe goed in hierdie behoefte kan voorsien nie. Spesiale afdelings moet beskikbaar gestel word (asook spesiale fasiliteite) om gevalle van veelvoudige besering op die beste manier te kan hanteer. Dit is juis hierdie soort gevalle wat so baie bekommernis vir die dokter en so veel ellende en ongeskiktheid vir die pasiënt veroorsaak.

Aangesien trauma hom nie steur aan die kunsmatige indeling van ons verskillende spesialisiteits-richtings nie, mag dit wel by geleentheid op kort kennisgewing nodig wees om gebruik te maak van al die bronne van 'n goed-toegeruste hospitaal. Dit mag selfs nodig wees om sekere gevalle, nadat opwekking en voorlopige behandeling in die naaste hospitaal uitgevoer is, na een van 'n halfdosyn of meer spesiale ongevalle-hospitale oor te plaas. Eenhede soos hierdie moet by voorkeur verbonde wees aan goed-toegeruste opleidingshospitale.¹

Vir hierdie soort vervoer, nl. van verafgeleë hospitale af na spesiale ongevalle-hospitale toe (op die grondslag van die groot afstande in ons land) moet ligte lugskepe gebruik word. Vervoer kan dan veilig, en sonder veel verdere trauma en verlies van tyd, behartig word.

Die ambulans- en transportdienste wat ons hier in die vooruitsig gestel het, mag wel baie duur kos en dus nie binne die grense van die uitvoerbare val nie. Dienste van hierdie aard sou egter teen 'n redelike onkoste onderneem kon word indien bevredigende skakelreeëlings bestaan tussen ambulansdienste en die lugdienste. Dit sou miskien moontlik kon wees om ligte lugskepe en helikopters gereed te hou by die bestaande vliegvelde wat orals oor die land versprei is. Hulle kan dan beskikbaar wees indien nodig, en hulle hoef dan nie as bykomstige las op die ambulansdienste as sodanig te rus nie. Ons lugdienste word op 'n hoë vlak van doeltreffendheid beheer, en bykomstige pligte soos die wat ons geskets het, sou kon bydra om die waarde en betekenis van die lugdienste van ons land te verhoog.

Dit lyk of die tyd aangebreek het vir die mediese professie om by die regering aan te dring daarop om by te

dra tot die skepping van bevredigende ambulansdienste vir alle beseerdes. Die aantal padongelukke en sterftes as gevolg van ongelukke vermeerder elke week. Dit sou ons hande oneindig sterk as 'n woordjie, wat op die regte plek

gespreek word, kon help om doeltreffende mediese dienste op die vroegste moontlike tyd beskikbaar te stel. Dit is 'n saak wat ons nie langer durf uitstel nie.

1. Aantekening (1961): *Lancet*, 2, 141.

TRANSPORTING THE INJURED

One of the difficulties in treating and salvaging patients who have been involved in serious accidents in this country, arises from the great distances that exist between hospitals. On our network of great country roads (one of the unpublicized wonders of Africa), the speed of vehicles increases year by year as road surfaces are improved and with more powerful car engines becoming more readily available to the general public. A motor accident in the towns is bad enough—in the country districts at high speeds the trauma is appalling. Consequently, injuries in the country tend to be far more severe than in similar accidents in the towns, and this is reflected in the mortality rate: 2% in town motor accidents as opposed to 12% in similar circumstances in the country.

Good transport of the injured is undoubtedly the key to better results in treatment. Military as well as civil authorities concerned with the treatment of accidents agree that, all things being equal, the sooner an injured person is removed to proper nursing and medical care, the better will be the results of treatment and the less prolonged will be the period of disability which is inevitable after any injury. However good transport may be, a certain amount of pain and additional injury is inflicted even by gently moving a person already injured, so that a very careful assessment of the relative value of early transport must be made immediately, and its advantages must be weighed against those of resuscitation on the spot.

It is in this early and essential assessment that the worth of the medical man declares itself. Medicine is still an art, and it is in these crucial decisions that experience and training count most. The decision may well have to be made rapidly, but proper first aid will allow a little latitude in these matters so that, if the basic requirements of an open airway and control of haemorrhage are achieved, some short time may be spent in deciding whether the interests of the patient are best served by moving him or not. There are very few therapeutic manoeuvres that can be applied without question to all cases. If this were not so, much therapy could be prescribed by rule of thumb, and the practice of medicine could be undertaken by non-registered robots. The variations in the conditions of the patients and in the individual circumstances of each injury make it quite certain that we shall have to wait a long time before the age of robot medicine is upon us.

Once it has been decided to move the patient, the smoothest, easiest and least-jolting method must be employed. For short runs of a few miles, the ordinary motor ambulance serves very well, but after 30 or 40 miles the noxious effects of transport, even in this type of ambulance, become apparent and the blood pressure of the patient drops as his state of shock increases. While, therefore, we cannot do better than to use motor transport in the towns and their near vicinity, attention should be

directed to improving services further outside the towns themselves.

The improvement in transport services for these relatively short hauls (30-100 miles) could perhaps best be achieved in country districts and in districts close to the towns by making available helicopter services to fetch the injured from the scene of a road accident to the nearest hospital where adequate resuscitation methods can be employed according to those simple basic principles that have long been known and practised.

What happens to the patient after he is moved to the hospital is going to depend on government policy. Until recently all hospitals were considered equally capable of handling all cases of trauma, and the patients were treated to the best ability of the medical and nursing staff of the hospital concerned. But it is now becoming recognized that all hospitals are not equally efficient in dealing with all cases of trauma. Special wards have been set aside or special hospitals have been built with special facilities to deal with accidents, particularly with those difficult cases of multiple injuries and serious accidents that cause so much worry to the doctor and so much misery and disability to the patient. Since trauma knows no anatomical bounds and does not respect the artificial boundaries of our registrable specialties, the whole resources of even a well-equipped hospital may be called upon at short notice to deal with these patients. It may be advisable to transfer these 'special' patients, once resuscitation in the nearest hospital has been achieved, to one of a half dozen special accident centres which it is now generally agreed can only exist within or close to a teaching hospital.¹

For this type of transport, i.e. from the outlying hospital to the accident centre, taking the size of our country and the long distances involved into consideration, light aircraft should be employed. Transport can then be effected safely, with no additional unnecessary trauma and with a negligible loss of time.

The ambulance and transport service which we have envisaged may well be found to be very expensive and, as such, Utopian and impossible of fulfilment. However, this apparently very expensive service can be provided at a reasonable cost to the country if proper liaison can be achieved between the ambulance services and the airforce. It may well be possible to maintain light aircraft and helicopters in the ordinary airforce aerodromes, which are dotted all over the country, so that they should be available when necessary; and their maintenance need not fall as an additional charge entirely on to the ambulance services themselves. The airforce is being maintained at a high level of efficiency by the authorities, and this additional duty would serve the double purpose of justifying its existence and of keeping the crews and material at a proper level of preparedness.

It is time that the profession came out with a statement

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urging the government to undertake to improve the ambulance services available to all injured. The number of road casualties and fatalities increases from week to week. We can ill afford to lose these people if a word in the

right quarter can help us to bring them under more efficient medical care in less time. The matter is urgent.

1. Annotation (1961): *Lancet*, **2**, 141.