First, do no harm: Old and new paradigms in rescue, resuscitation and trauma prevention

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Treatment 1, Serendit, November 4, 2015, 1:30 PM - 3:00 PM

The balance between benefit and risk is central to the work of all who are involved in rescue, first aid training and trauma prevention advocacy. Risk is a common term in today's society and refers to the potential to lose something of value, it can be found in the common lexicon of: financial loss/gain (risk of losing money), health (risk of ill health), workplace health & safety (risk of injury), technology (risk of losing data), insurance, and gambling. With each risks taken there is a perceived benefit from taking the risk otherwise it is unlikely the risk would not be taken, for example I will risk $1,000 on shares in a company as I expect that the benefit to me will be an increase in the price of the shares, you would not buy the shares if you thought you were going to lose money. Often the higher the risk, the greater the potential gain or loss. It also implies that you do not have all of the information available to know the exact likelihood of an outcome, a common situation where rescue, first aid and resuscitation are undertaken.

The Hippocratic exhortation of 'Primum Non Nocere', 'First, do no harm' is an axiom with a history of 2,000 years. Superficially, all would support this dictum; but harm can result from not doing something. The balance between inadequate or no intervention on the one hand, and proactive intervention with iatrogenic risk is thus a complex one. There has been a 180-degree reversal of intervention philosophy and practical doctrine in the domain of resuscitation teaching and practice, over the past 30 years. For example, the Australian Resuscitation Council (ARC) today has as it central moto 'Any attempt at resuscitation is better than no attempt'; this in stark contrast to earlier standard first aid conservatism embodied in such phrases as 'don't do anything for which you are untrained'. Subject of risk-benefit ratios is a topical one; and one which requires regular reappraisal as new research is published.

Team Focused, "Pit Crew" Drowning Resuscitation: Case Reports and a Novel Approach for Pre-Hospital Providers

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Treatment 1, Serendit, November 4, 2015, 1:30 PM - 3:00 PM

Objectives
The 2010 American Heart Association (AHA) guidelines for cardiopulmonary resuscitation (CPR) emphasize early, effective chest compressions with minimal interruptions and early defibrillation. To achieve these goals, numerous Emergency Medical Services (EMS) agencies have implemented "Team Focused" or "Pit Crew" CPR programs. These are designed, pre-assigned roles to EMS providers during out of hospital cardiac arrest (OHCA), thus decreasing confusion of role assignment and increasing the chest compression fraction. Historically, survival to hospital discharge with good neurological outcome from OHCA averages 8 %. Choreographed approaches to CPR have shown increase in survival to hospital discharge in OHCA with some areas in the USA demonstrating survival rates as high as 39 %. To date, there are no published protocols or case reports on the use of team focused or pit crew CPR in the resuscitation of drowning patients.

Methods
After receiving training on drowning resuscitation, Wrightsville Beach Ocean Rescue (Wrightsville Beach, NC, USA) developed and implemented a Team-Focused Drowning Resuscitation Protocol that emphasized early oxygenation, ventilation, and effective chest compressions. The first two cases in which it was used and the protocol are presented.

Roles are assigned to the first five rescuers to arrive on scene, in order of arrival, but can be performed with 2 rescuers. The first rescuer to arrive positions themselves at the patients head and carries only the bag valve mask (BVM) and immediately delivers five ventilations. The second rescuer positions themselves on the patients right side and brings all resuscitation equipment from the ambulance and checks the patients pulse, initiating chest compressions as necessary. The third rescuer positions themselves on the patients left side and checks the patients pulse and alternates chest compressions every two minutes as necessary with the second rescuer. The fourth rescuer does not have a specific position and inserts two nasopharyngeal and one oropharyngeal airways into the patient as indicated, attaches the Automated External Defibrillator (AED), and places a supraglottic airway (King Airway, ©King Systems, USA 2010) as indicated. The fifth rescuer is the supervising officer and coordinates care, contacts other responding agencies as needed, and coordinates movement of the patient.

Results
The first two patients, a 58 year old female and a 22 year old male, both pulseless and apneic initially, to receive Team-Focused CPR for drowning resuscitation after implementation of the new protocol survived to hospital discharge with no observable neurologic deficit.

Conclusion
Team-Focused CPR, though initially developed for cardiac arrest due to witnessed, OHCA, can be adapted to drowning resuscitation to ensure immediate ventilation and oxygenation. Pre hospital providers, including lifeguards and EMS, are encouraged to develop resuscitation protocols specific to drowning resuscitation.

Future Direction
Further prospective research is needed to identify best practices for pre-hospital drowning resuscitation.

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Comparison of supraglottic airways to standard techniques for ventilation during simulated cardiac arrest by Australian surf lifesavers

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Treatment 2, Serendit, November 4, 2015, 3:30 PM - 5:30 PM

Background

Surf Lifesavers are taught to use standard techniques for ventilation during Cardiac Pulmonary resuscitation (CPR), such as pocket mask rescue breathing (PM) and Bag Valve Mask (BVM). The ability to train Surf Lifesavers to use supraglottic airways has not been previously assessed.

Methods

113 Surf Lifesavers, trained in Advanced Resuscitation Techniques, were exposed to a training intervention on the use of supraglottic airways (the iGel and LMA Supreme) in simulated cardiac arrest.

The primary outcomes: mean time to first effective ventilation, absolute failure of ventilation (defined as no effective ventilations in a cycle -2 minutes of cpr), proportion of times ventilation was attempted and was successful, and total hands off time (interruption of CPR due to ventilation) was compared for each device as well as a number of secondary outcomes .

Non-parametric non-inferiority between devices compared to the Bag Valve Mask (current standard of Australian Lifesaving care) was tested using the Mann-Whitney U test. Correlations between demographic factors and the primary outcomes were assessed using Spearman rank

Results

Ventilation performed by surf lifesavers in simulated cardiac arrest was superior with Pocket Mask compared to ventilation performed with Bag Mask Valve and both supraglottic airways (Igel and LMA Supreme).

The mean time to first effective ventilation was significantly lower with PM (17.89 seconds) compared with BVM (20.34 seconds) , LMA (36.5 seconds) and IGel (22.52 seconds) (p values 0.08, 0.0001, 0.0001 respectively).

The PM outperformed BVM and IGel in achieving at least one effective ventilation in a resuscitation cycle (absolute failure of ventilation was defined as no effective ventilations in a cycle (p values 0.03 , 0.03 respectively). The ability to achieve one effective ventilation per cycle was equivalent between PM and LMA.

The proportion of times ventilation was attempted and was successful was greater using the PM compared to BVM and IGel (p values 0.005, 0.001 respectively). The proportion of times ventilation was attempted and was successful was equivalent between PM and LMA.

However the total hands off time (interruption of CPR due to ventilation) was greatest with the PM (13.51 seconds) compared with BVM (10.84 seconds) , LMA (10.85 seconds) and IGel (10.41 seconds) (p values 0.0001, 0.0001, 0.0001 respectively).

Conclusions

The study demonstrates that Lifesavers can be trained to successfully use advanced airway devices used by other healthcare professionals.

In this study of simulated cardiac arrest PM was superior in measures of ventilation compared with the BVM and IGel. However the use of PM was associated with a longer interruption of CPR due to ventilation. Determining the superiority of any one device requires consideration of time taken to first effective ventilation, the likelihood of successful insertion and the ease of use of the device in the arrest situation.

I-gel supraglottic airway use in cardiac arrest secondary to drowning – a case series from UK search and rescue

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Poster Session 1, Poster Foyer, November 4, 2015, 9:00 AM - 5:15 PM

Objectives & Background

The UK maintains a 24-hr search & rescue (SAR) helicopter service covering UK land & surrounding maritime areas. There are currently 12 helicopter bases, both military & civilian. Medical provision is currently paramedic or technician-level crew.

Tracheal intubation is considered the gold standard for airway management/ventilation in drowning casualties, but alternative methods are required when intubation is unsuccessful/impractical or for technician-level winchmen. Current options for UK SAR include Bag-Valve-Mask (BVM) ventilation +/- adjuncts or the I-gel (Intersurgical Ltd) supraglottic airway device (SAD).

For the drowning casualty early positive pressure ventilation, preferably with oxygen, aims to treat the hypoxaemia thereby improving survival(1). There is growing interest in the use of SADs for those not competent in tracheal intubation(2,3). Conversely there is opinion that they are not fit for purpose as the pressure required to overcome the decreased compliance of "drowned" lungs is greater than the seal pressure of the device(4) and that they "won't work" in drowned patients.

We present a case series of drowning casualties where an I-gel was used, in order to establish the efficacy of the device in this scenario.

Methods

The crews of all UK SAR helicopters were contacted by email in Jan 2015 & asked to report cases where I-gels had been used during resuscitation of drowned casualties. Specifically:

Was ventilation achieved?

Did the I-gel "float" out & how well did it work to ventilate the casualty?

Results

We received 11 replies (2 duplicates, 9 cases). Indications for insertion were first choice device (N=5); unable to ventilate with BVM (N=2); failed intubation (N=2). Ventilation via the I-gel was achieved in 100% (N=9) of cases.

Chest rise was described as "very good" (N=1) "good" (N=4), "small" (N=2) & not commented upon in the remainder. 27% (N=3) had problems: dislodged with CPR (N=1) & excessive suction required due to water-logged airway (N=2). Whilst not requested, crews volunteered that one casualty survived to discharge & one died. Outcome of the remainder is unknown.

Conclusion

This series confirms that the I-gel can achieve ventilations in a casualty in cardiac arrest due to drowning.

Water in the oropharynx is common during these events: first-generation SADs reportedly "float" out, but this seemed less of a problem with the I-gel.

It also highlighted that the gastric port of the I-gel was rarely used for suction/ drainage of gastric/ oropharyngeal water. This later point suggests that practitioners should be competent in I-gel insertion and oropharyngeal/ gastric port suction.

We conclude that the I-gels is appropriate for airway management in drowning casualties, should tracheal intubation be unavailable/impractical or as an airway rescue device. However, training should include use of the oropharyngeal and gastric port suction.

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Underwater resuscitation

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Treatment 2, Serendit, November 4, 2015, 3:30 PM - 5:30 PM

Introduction
Airway management, mechanical ventilation and resuscitation can be performed even in space but not under water. The present study assessed the technical feasibility of resuscitation under water.

Methods
Airway management was assessed in a water-filled hyperbaric chamber at 20m of depth using a video laryngoscope, an optical stylet and an intubating laryngeal mask. Mechanical ventilation was successful to a maximum depth of 50 meters using a modified resuscitator. Chest compressions were performed to a maximum depth of 50 meters using the LUCAS.

Results
Endotracheal intubation was possible within less than one minute with all approaches evaluated. However, removal of water from the airways was inefficient with the suction system used in this study. Mechanical ventilation was possible from the surface to the maximum depth of 50m but the ventilation rates, minute volumes and tidal volumes changed with increasing depth. The LUCAS was operating at 50m depth but the compression rate around 230 bpm was far too high for efficient chest compressions.

Conclusions
Underwater airway management appears generally possible and also mechanical ventilation succeeded with the device used. In contrast, fundamental improvements are required for the suction system and the LUCAS chest compression device.

Evaluation of the first 4 years of automated external defibrillators (AED) at lifeboats

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Treatment 2, Serendit, November 4, 2015, 3:30 PM - 5:30 PM

Automated External Defibrillators (AED's) increase survival rates of out-of-hospital cardiac arrests and the stored electronic information of AED's can be used for the analysis of the quality of resuscitation. In 2011, the Royal Dutch Lifeboat Institution (KNRM) received a donation to purchase 65 AED's for each of their lifeboats. As far as we know, nothing is known about the efficiency of AED's on lifeboats. Therefore, all resuscitations by lifeboat crews since 2011 have been investigated and the AED rhythm strips have been analysed for quality purposes.

Setting
The Royal Dutch Lifeboat Institution (KNRM) covers the North sea and most large open waters in the Netherlands by 45 lifeboat stations and 1300 volunteers.

Results
Between July 2011 and January 2015, the KNRM has been involved in 16 resuscitations. In 15 cases sufficient data is available for evaluation. Victims are located in open water (n=8), sea (n=6) and on land (n=1). Twelve resuscitations (80%) take place in (very) unfavourable weather conditions: wind speeds up to 7 Beaufort and wave heights up to 4 meters. Mean age of the victims is 42.4 years (95%CI 30 – 54), 87% is male (n=13). After the alarm call, it takes 17 minutes (95%CI 7 – 27) for the lifeboat crew to arrive on-site; Average time between arrest and start of Basic Life Support by KNRM, by other services or bystanders, has been 22 minutes (95% CI 7 – 38).

Nine victims have been declared dead on-site after resuscitation attempts were taken over by ambulance crew or helicopter doctor. Six victims have been admitted to a hospital; three with return of spontaneous circulation (ROSC) on-site, one with no ROSC during transport to hospital and unknown ROSC for two victims. Three admitted victims have been declared dead in the hospital, one survived to hospital discharge; of two victims it is unknown if they have survived.

The KNRM AED's have been used during the resuscitation of eight victims (53% of all resuscitations). The average time between alarm call and attachment of the AED was 43 minutes (95%CI 19 – 67). Seven victims where the AED has been used have been declared dead on-site; one victim is transported by ambulance; it is unknown whether this patient had ROSC.

Eleven of the resuscitated victims are drowning victims (73% of the resuscitations); six are declared dead on-site and five are admitted to hospital. Two with ROSC on site, one with no ROSC and unknown in two. One of the drowning victims with ROSC on-site survived to hospital discharge. The AED was used in 5 drowning victims (45%). One automated shock was delivered during the course of one resuscitation, but without ROSC. No shock was delivered in 4 victims; none had ROSC.

The electronic data of all eight AED applications could be retrieved and analysed which resulted in information relevant for feedback and resuscitation training. This includes information on delay in AED attachment, compression frequencies, compression / ventilation ratios and CPR pause times.

Conclusion
The frequency of the application of an AED by lifeboat crews is very low. It occurs under more difficult conditions and in a different population than most out-of-hospital resuscitation. We have found prolonged call times and delays in the attachment of the AED. During the first 3,5 years, the AEDs on KNRM lifeboats did not contributed to survival in the first eight victims where the AED has been used. At the same time, it the electronic stored information in the AEDs is useful to evaluate the quality of the resuscitation incidents.

Pre-Hospital Drowning Resuscitation: A Novel Statewide EMS Protocol

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Treatment 2, Serendit, November 4, 2015, 3:30 PM - 5:30 PM

Objectives

Drowning remains a leading cause of accidental injury death in the United States and is associated with significant morbidity. Since the morbidity and mortality of drowning are secondary to hypoxemia and cerebral anoxia, emergent treatment requires prompt delivery of oxygen and appropriate ventilation. The 2010 Emergency Cardiovascular Care cardiopulmonary resuscitation (CPR) guidelines for Basic Life Support (BLS) and Advanced Life Support (ACLS) emphasize chest compressions and automated external defibrillator (AED) use for cardiac arrest patients and present a Compression, Airway, Breathing (CAB) paradigm to be utilized over the traditional Airway, Breathing, Circulation (ABC).

Likely due to the radical change in thinking of the pre-hospital provider, extensive training has occurred on the CAB protocol, which has caused many training officers to overlook that drowning is treated as a special case and requires the ABC approach. A group of Emergency Medical Services (EMS) medical directors, created a statewide drowning protocol to address this need and it was summarily approved by the state Office of EMS. This presentation will discuss the physiology of drowning and the protocol that was developed. It is the authors intent that this protocol serve as a model for other pre hospital and lifeguards agencies.

Methods

Utilizing an online Delphi method, a group of EMS Medical Directors created a new statewide EMS protocol that emphasized early oxygenation and ventilation while addressing many of the myths and misconceptions about drowning resuscitation. There was a de-emphasis on spinal immobilization, defibrillation, and airway suctioning.

Results

The proposed protocol was approved by the State Office of EMS and implemented immediately for the over 35,000 credentialed First Responder, Emergency Medical Technician, and Paramedic practitioners in the state.

Patent assessment is broken into 3 categories, awake and alert, awake but with altered mental status (AMS), and unresponsive. For the awake and alert patient, the first step is supplemental oxygen as tolerated by non-invasive methods, then selective spinal immobilization as indicated, removal of wet clothing and warming the patient, then monitoring and reassessment. Transport is encouraged for asymptomatic and minimally symptomatic patients who have been rescued from drowning. Asymptomatic pts are encouraged to seek care if they becoming symptomatic within 6 hours.

For patients that are awake with AMS, initial treatment is 5 ventilations via mouth to mouth or bag valve mask ventilator (BVM). If patient has adequate respiratory effort, the BVM is stopped and non-invasive supplemental oxygen is initiated via partial rebreather mask or nasal cannula. The age appropriate airway protocol is initiated, which may include CPAP, supraglottic airway, or endotracheal intubation. Next, the age appropriate AMS protocol is utilized, which includes screening of blood glucose levels. The patient is then warmed and dried, then intravenous line established, and the age appropriate respiratory distress protocol as needed. The patient is then transported to the age appropriate receiving hospital.

For patients that are unresponsive, the initial treatment is 5 ventilations via mouth to mouth or BVM. The next step is to check for a pulse, and if absent, the age appropriate cardiac arrest and selective spinal immobilization protocol initiated. If patient has a pulse, then the age appropriate airway protocol is utilized, then the remainder of the algorithm is the same as awake with AMS.

Conclusion

Once prevention fails and the rescue has been performed, drowning resuscitation requires early attention to reversal of hypoxemia and cerebral anoxia. A practical drowning resuscitation protocol requires emphasis on early oxygenation and ventilation instead of early chest compressions as in cardiac arrest of cardiac etiologies. This protocol serves as a starting point for other EMS, lifeguard, police, fire, and rescue agencies seeking to update their drowning protocol.

Shallow water blackout - risks and prevention

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Treatment 2, Serendit, November 4, 2015, 3:30 PM - 5:30 PM

Coronial records and clinical experience have long identified that group of immersion fatalities where a competent swimmer does not surface in calm water, one cause of this tragic syndrome is 'Shallow Water Blackout' (SWB). SWB is a term commonly used to describe the loss of consciousness underwater caused by a lack of oxygen to the brain following breath-holding. Whilst uncommon, there is strong evidence to suggest the pre-immersion hyperventilation is one preventable cause. The activity of breath-holding is common and often perceived to be an essential part of some underwater sports, such as underwater hockey, synchronised swimming, lifesaving and freediving (the activity of seeing how deep a person can swim on one breath). It is also common recreationally, as many would remember from their childhood, trying to swim as far as possible underwater on a single breath. In the past, endurance underwater swimming has been a featured event of swimming carnivals - with one school awarding the 'Long Dive' medal to the boy who won. Pre-dive hyperventilation is also used by some occupationally such as to fish, gather pearls and make repairs to boats. SWB occurs because the normal, protective 'breakpoints' – the irresistible urge to breath – have not been triggered before unconsciousness (due to cerebral hypoxia). There are two chemical sensors in the body which detect the levels of oxygen and carbon dioxide (CO2) which protect us from a lack of oxygen. The CO2 sensor is the most sensitive. Hyperventilation, i.e. 'blowing off' too much CO2 before submerging can interfere with the sensor, which is not triggered early enough to prevent blackout. All who work, volunteer and serve in the aquatic industries can be advocates to highlight the danger of pre-immersion hyperventilation to aid endurance swimming or diving. This presentation will explore the physiology of breath holding, the development of preventative stratagems and safety policies. We posit that all members of the aquatic world can develop and promote policies which will reduce the incidence of the preventable cause of drowning.

Intentional Hyperventilation prior to breathhold and submersion – hypoxia or arrhythmia as the killer?

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Symposium 2 - Hypoxic Blackout, Serendit, November 5, 2015, 1:30 PM - 3:00 PM

Breath holding and submersion with prior intentional hyperventilation has been associated with loss of consciousness and subsequent mortality(1, 2). During hyperventilation the partial pressure of arterial carbon dioxide (CO) is reduced. As the main stimulant for respiratory drive, a reduction in CO will prolong breath hold time. With prior hyperventilation the stimulus to break breath hold and breathe may occur after the individual has utilised available oxygen thereby becoming hypoxic with resultant loss of consciousness.

The aim of our study was to examine the cardio-respiratory responses to breath holding with prior intentional hyperventilation and subsequent submersion.

The study used a within subject repeated measures design, each participant being their own control. Six participants completed a series of tests in 3 environmental conditions. Air (20°C), Immersed (25°C) (head above the water), Submerged (25°C) (head below). Three experimental comparisons were performed in each of the conditions. This consisted of maximum breath hold time followed by re-breathing (total time 75 seconds); +/-3 minutes of light exercise that continued during breath holding and re-breathing; +/-1 minute of prior hyperventilation to an average end-tidal fractional concentration of CO^2($FetCO^2$[%]) of 3%. All breath holds commenced following a measured volume inspired from end-expiratory lung volume (75% of the inspiratory capacity). Inspiratory volume, respiratory rate, fractional end-tidal carbon dioxide ($FetCO^2$), fractional end-tidal oxygen ($FetO^2$), pulse-oximetry (SpO^2) and electrocardiography (ECG) were measured.

Examination of breath hold times demonstrated that hyperventilation increases the duration of breath hold in all conditions (mean[SD]data: Air 56.3[20.6]s cf. 95.5[18.5]s; Immersion 38.2[8.6]s cf. 64.2[15.8]s; Submersion 28.1[10.9]s cf. 50.5[28.8]s).

Additionally the $FEtO^2$ levels at break of breath hold were lower following hyperventilation compared with no breath hold alone (mean[SD]data: Immersion 96.23[9.71]mmHg cf 85.08[21.07]mmHg; Submersion 107.49[20.47]mmHg cf 102.00[25.56]mmHg), and the $FEtCO^2$ was lower in the hyperventilation tests following hyperventilation to an $FEtCO^2$ of 3% in both conditions (mean[SD]data: Immersion 50.46[2.02]mmHg cf 45.05[1.94]mmHg; Submersion 46.43[2.93] mmHg cf 41.04[3.41]mmHg). No subjects were hypoxic during any of the immersion or submersion conditions (lowest SpO^2 95.5% with Immersion breath hold, hyperventilation and no exercise). No participant subjectively described symptoms close to "blacking out".

Multiple significant junctional arrhythmias were seen in two participants during submersion with prior hyperventilation and breath hold. Minor arrhythmias of atrial or sinus node origin were seen in all participants immediately prior to, or within 20 seconds of the break of breath hold. No arrhythmias were described as symptomatic by any participants. This would be consistent with the observation of arrhythmias associated with the break of breath hold in previous studies(3).

This study suggests that an isolated episode of, non-competitive, moderate hyperventilation prior to breath hold and submersion or immersion is not associated with loss of consciousness due to hypoxia, despite hyperventilation increasing the duration of a breath hold in all experimental conditions. This study did not examine extreme hyperventilation in a competitive context and the potential for hypoxia as a result. Hyperventilation was associated with a higher incidence of cardiac arrhythmias; this observation may explain episodes of sudden cardiac death in water following intentional hyperventilation prior to immersion or submersion, thus supporting the theory of autonomic conflict.(4)

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Supraglottical airway devices for rescue swimmers – is it feasible

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Rescue 7, Ballroom 1, November 6, 2015, 11:00 AM - 12:30 PM

Introduction

In drowning, the first and most important measure is the treatment of hypoxaemia as prompt initiation of rescue breathing or positive pressure ventilation increases survival. Therefore administration of high flow oxygen and a continuous positive airway pressure may improve the outcome and should be performed as soon as possible. Both is not possible by mouth-to-mouth ventilation but can be done by the use of a supraglottical airway device. We tested, if rescue swimmers can be trained in the use of such devices and which is better to work with.

Methods

Eighteen lifeguards with no experience with these techniques performed a manikin training on bag-mask-ventilation and the insertion of a laryngeal mask and a laryngeal tube. After this training, five of them, who were students at the Ulm medical school, performed bag-mask-ventilation and the insertion of a laryngeal mask and a laryngeal tube at their clinical training in the OR in patients with general anaesthesia under the supervision of a full trained anaesthesiologist. Additionally, we assessed the feasibility and time requirement for the insertion of a laryngeal tube in open water in a manikin model.

Results

In the manikin training all subjects were able to perform a sufficient bag-mask-ventilation after a training time between 10 and 18 min. All subjects were able to insert both devices after only few attempts properly. When being asked, 15 of them were in favor for the laryngeal tube for easier use, three of them felt no differences.

Although the five who had the chance to test it on a patient felt safe after the training, bag-mask-ventilation failed depending on individual specialities of the patients (such as beard, form of the face and others), so the anaesthesiologist had to take over. In all patients the supraglottical airway devices could be inserted, but when a laryngeal mask was used, it had to be replaced more often to prevent leakage.

Furthermore, even in open water, the insertion of the laryngeal tube was performed successfully and quickly and sufficient ventilation was possible during swimming.

Discussion

Lifeguards can be trained in the techniques of a bag-mask-ventilation and the insertion of a supraglottic airway device but bag-mask-ventilation may fail in a real life scenario because of difficult patient anatomy. In this study, the placement of a supraglottic airway device was successful also in a real life scenario, here the tendency is in favor of the laryngeal tube which may have some advances especially in water rescue. Water rescue organizations should consider taking trainings on the use of such devices in their training programs for life guards.