

References

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SUZHOU RESUSCITATION ACADEMY

2016

社区和电话指导心肺复苏——生存链的强化环节



最佳实例及支持证据

必须迅速识别心脏骤停

询问呼叫者：患者有意识吗？患者的呼吸正常吗？

2015年指南对电话指导心肺复苏的建议：识别院外心脏骤停前必须要明确两问题：（1）患者意识清醒吗？（2）患者呼吸正常吗？如果两个问题的答案是“不，”那么调度员应尽快指导开始心肺复苏。不要纠结于这些，诸如“患者有任何健康问题吗？”或者“他皮肤是什么颜色”等问题，浪费时间。

询问患者呼吸是否正常可使调度员了解到患者存在濒死呼吸的情况。濒死呼吸在心脏骤停事件中很常见，而且与更高的生存率有关。¹

如果还不清楚患者呼吸是否正常，你可以让呼叫者把电话放在患者嘴边，以便你亲自听患者的呼吸。作为决策者，如果你不确定是否是心脏骤停事件，你应该指导开始实施心肺复苏。如果首次紧急呼叫是因为患者突然发作，接线员应高度怀疑心脏骤停。接线员对心脏骤停的识别关系到患者生存率的提高。²

仔细听呼叫者在一开始报告的情况，这很重要。有时候，呼叫者在一开始就可以提供调度员需要知道的信息。“我的丈夫没有反应并且喘不上气”。不需要再问任何问题——很明显这是一个可能发生心脏骤停的成年患者。

呼叫者在回答患者的病史或者目前状况时可能会很啰嗦，调度员在必要时候应该打断他，果断反过来询问他那两个基本问题。通常情况下，呼叫者会很恐慌。让他们相信你会立刻给予帮助。这可能类似于一种交易——你为他们做了事，现在你需要他们为你做事。

心脏骤停患者需要高质量的心肺复苏

在急救车到来之前高质量的心肺复苏可提高存活率

每年约55/100000的心脏骤停得到了治疗，³ 其中2.2/100000与运动有关，0.3/100000年龄小于35岁。⁴ 平均年龄67岁，64%是男性患者，70–80%发生在家里。⁵⁻⁷

心肺复苏术能够挽救生命。一项研究表明，在急救车到来之前实施心肺复苏的患者生存率提高4倍以上。⁸ 心肺复苏也可以维持室颤，^{9,10} 这更有助于AED发挥作用。但并不是所有患者都需要使用AED。活着入院的患者中大约一半没有除颤，¹¹ 但是所有患者都实施了心肺复苏。

对大多数患者来说，在急救车到来之前，可用单纯的胸外按压式心肺复苏术代替传统的心肺复苏术。¹²⁻¹⁴ 然而，传统的心肺复苏术对儿童或者非心脏疾病如溺水，窒息的成年人来说是最好的方法。^{15,16} 实施传统心肺复苏术的儿童复苏效果比单纯胸外按压者一般高5倍。¹⁷

施救者的心肺复苏质量有所差异。在三项研究中，仅仅只有一半的施救者能够实施高质量的心肺复苏，¹⁸⁻²⁰ 而高质量心肺复苏的生存率比不合格的心肺复苏高将近3倍。在一项研究中，实施高质量心肺复苏的患者生存率比未实施心肺复苏的患者高7倍。²¹

处理心脏骤停事件，施救者需要帮助

受过与未受过培训的施救者在电话指导下都可以实施高质量心肺复苏

施救者担心会对患者造成伤害。在一项研究中，仅2%的非心脏骤停的患者在心肺复苏中出现骨折，没有患者出现内脏器官的损害。²²

一半的施救者是退休者和老人，35岁以下的只有12%。²³ 由于在家中缺乏施救者实施心肺复苏，心脏骤停发生在家里的患者生存率低于在公共场所。²⁴⁻²⁶ 施救者经常单独与患者在一起。²³ 由于在家中缺乏施救者实施心肺复苏，只有5%的病例的施救者是陌生人。²³

两项研究发现，仅有一半的施救者受过心肺复苏的培训。^{6,7} 受过培训的施救者在求助911时，仅113人首先自己实施心肺复苏。未实施心肺复苏的主要原因是恐慌。在调度员的指导下，75%的受过培训的施救者可以实施心肺复苏。通过在心肺复苏中培训非专业人员，西雅图的施救者心肺复苏率达到一个稳定水平。²⁷ 这开创了电话心肺复苏的发展，随之提高了施救者心肺复苏率以及患者存活率。^{28,29}

甚至卫生专业人员也可以受益于调度员的协助。一项研究表明，在准确评估紧急状况时，他们并不比非专业人员好。³⁰

给予有效的呼吸支持很困难，而且，在美国仅仅一半的施救者能够提供有效的通气。在一次模拟研究中，在调度员指导下，有效通气比例由43%提高到77%。³¹

调度员与呼叫者是第一救援团队

在电话辅助下，患者可以受到更多更高质量的心肺复苏

像斯坦万格（73%），西雅图（69%），瑞典和丹麦（66%）这些施救者心肺复苏率高的地方，在电话心肺复苏以及施救者培训项目方面已经投资了很多年。^{8,32-34} 电话心肺复苏的高效团队合作可以促使快速识别院外心脏骤停，实施高质量的胸外按压，提高存活率。³⁵⁻³⁷ 调度员在生存链中的重要性在2015年指南，IOM报告和³⁸提高生存率的十个步骤中被认可。³⁹

对调度员培训可以改进对院外心脏骤停的识别，且能缩短首次胸外按压时间。^{35,40}

经过认真调整，在调度员指导下能进一步缩短首次胸外按压时间，在持续的指导下，也可以改善心肺复苏质量。⁴¹⁻⁴⁴

对非专业人员培训心肺复苏能让他们更好地处理现实情况，挪威和首尔已经在这样做了。⁴⁵ 人们不想独自做心肺复苏。根据瑞典的一项采访调查显示，对于仅仅完成对传统心肺复苏培训的人们来说，调度员的协助将会使心肺复苏更容易。⁴⁶

对患者来说，最好的组合是，训练有素的能进行电话辅助下心肺复苏的非专业人员，训练有素的调度员，以及持续的指导。在一个10分钟的模拟心脏骤停的情景中测试这样的组合，结果是，与传统训练的施救者以及传统的调度员指示相比，前者实施了1056次胸外按压，而后者只实施了852次胸外按压。⁴⁷