

ECC ACS

[CQ] 病院前で ACS が疑われる傷病者に、医師以外の医療従事者による病院前ニトログリセリン投与を行うべきか？ (SysRev2020) (EvUp2025)

[Nakayama. Circ Rep. 2022; 4(10):449-457] [JRC 蘇生ガイドライン 2020 p. 297]

[P]病院前で ACS が疑われる傷病者

[I]医師以外の医療従事者が病院前でニトログリセリンを投与すること

[C]医師以外の医療従事者が病院前でニトログリセリンを投与しないこと

[O] 30 日死亡, 1 年死亡

[S]RCT および観察研究を対象

[T]英語で記載された研究を 2025 年 1 月 28 日に調査 (2025 年 7 月に再調査)

[Prehospital Administration of Aspirin and Nitroglycerin for Patients With Suspected Acute Coronary Syndrome - A Systematic Review.](#)

Nakayama N, Yamamoto T, Kikuchi M, Hanada H, Mano T, Nakashima T, Hashiba K, Tanaka A, Matsuo K, Nomura O, Kojima S, Yamaguchi J, Matoba T, Tahara Y, Nonogi H; Japan Resuscitation Council (JRC) Acute Coronary Syndrome (ACS) Task Force and the Guideline Editorial Committee on behalf of the Japanese Circulation Society (JCS) Emergency and Critical Care Committee.

Circ Rep. 2022 Jul 28;4(10):449-457. doi: 10.1253/circrep.CR-22-0060. eCollection 2022 Oct 7. PMID: 36304434

Search strategies of literature databases

Search strings

1. PubMed (MEDLINE & PMC)

#1: "Myocardial Ischemia"[MeSH Terms:noexp] OR "myocardial isch*"[Title/Abstract] OR "myocardial infarction"[MeSH Terms:noexp] OR "myocardial infarction*"[Title/Abstract] OR "acute coronary syndrome*"[Title/Abstract] OR "ACS"[Title/Abstract] OR "ischemic syndrome*"[Title/Abstract] OR "coronary disease"[MeSH Terms] OR "coronary disease*"[Title/Abstract] OR "coronary artery disease*"[Title/Abstract] OR "acute coronary syndrome"[MeSH Terms] OR "non st elevated myocardial infarction"[MeSH Terms] OR "st elevation myocardial infarction"[MeSH Terms] OR "STEMI"[Title/Abstract] OR "STEACS"[Title/Abstract] OR "STE-ACS"[Title/Abstract] OR "Q-wave-MI"[Title/Abstract] OR "acute myocardial Infarction"[Title/Abstract] OR "chest pain"[Title/Abstract] OR "unstable angina*"[Title/Abstract] OR "angina, unstable"[MeSH Terms] OR "chest pain*"[Title/Abstract] OR "chest pain"[MeSH Terms]

#2: "aspirin"[MeSH Terms] OR "aspirin"[Title/Abstract] OR "nitroglycerin"[MeSH Terms] OR "nitroglycerin*"[Title/Abstract] OR "nitro-glycerin*"[Title/Abstract]

#3: "emergency medical services"[MeSH Terms:noexp] OR "ambulances"[MeSH Terms] OR "air ambulances"[MeSH Terms] OR "transportation of patients"[MeSH Terms:noexp] OR "emergency medical service*"[Title/Abstract] OR "emergency service*"[Title/Abstract] OR "ems system*"[Title/Abstract] OR "emergency health service"[Title/Abstract] OR "prehospital emergency*"[Title/Abstract] OR "Prehospital EMS"[Title/Abstract] OR "doctor car*"[Title/Abstract] OR "rapid response car"[Title/Abstract] OR "rapid response vehicle"[Title/Abstract] OR "helicopter emergency"[Title/Abstract] OR "HEMS"[Title/Abstract] OR "ambulance*"[Title/Abstract] OR "SMUR"[Title/Abstract] OR "physician-staffed"[Title/Abstract] OR "physician response vehicle*"[Title/Abstract] OR "emergency medical technician*"[Title/Abstract] OR "EMT"[Title/Abstract] OR "EMT-P"[Title/Abstract] OR "paramedic*"[Title/Abstract] OR "emergency responder*"[Title/Abstract] OR "nurse*"[Title/Abstract] OR "paramedics"[MeSH Terms] OR "emergency technician*"[Title/Abstract] OR "Nurses"[MeSH Terms:noexp] OR "rescue personnel"[Title/Abstract] OR "Emergency Responders"[MeSH Terms:noexp] OR "prehospital"[Title/Abstract] OR "pre-hospital"[Title/Abstract] OR "out-of-hospital"[Title/Abstract] OR "physicians, family"[MeSH Terms] OR "physicians, primary care"[MeSH Terms] OR "family physician*"[Title/Abstract] OR "family doctor*"[Title/Abstract]

OR "primary care physician*" [Title/Abstract] OR "primary care doctor*" [Title/Abstract] OR "primary physician*" [Title/Abstract] OR "primary doctor*" [Title/Abstract] OR "referral physician" [Title/Abstract:~2] OR "referral doctor" [Title/Abstract:~2] OR "referring physician" [Title/Abstract:~2] OR "referring doctor" [Title/Abstract:~2] OR "referral physicians" [Title/Abstract:~2] OR "referral doctors" [Title/Abstract:~2] OR "referring physicians" [Title/Abstract:~2] OR "referring doctors" [Title/Abstract:~2] OR "general practitioner*" [Title/Abstract] OR "General Practitioners" [MeSH Terms]

#4: #1 AND #2 AND #3

2. Web of Science (Science Citation Index Expanded(SCIE))

#1: TS="myocardial isch*" OR TS="myocardial infarction*" OR TS="acute coronary syndrome*" OR TS=ACS OR TS="ischemic syndrome*" OR TS="coronary disease*" OR TS="coronary artery disease*" OR TS=STEMI OR TS=STEACS OR TS=STE-ACS OR TS=Q-wave-MI OR TS="acute myocardial Infarction" OR TS="chest pain" OR TS="unstable angina*"

#2: TS=aspirin OR TS=nitroglycerin* OR TS=nitro-glycerin*

#3 TS="emergency medical service*" OR TS="emergency service*" OR TS="ems system*" OR TS="emergency health service" OR TS="prehospital emergency*" OR TS="Prehospital EMS" OR TS="doctor car*" OR TS="rapid response car" OR TS="rapid response vehicle" OR TS="helicopter emergency" OR TS=HEMS OR TS=ambulance* OR TS=SMUR OR TS=physician-staffed OR TS="physician response vehicle*" OR TS="emergency medical technician*" OR TS=EMT OR TS=EMT-P OR TS=paramedic* OR TS="emergency responder*" OR TS=nurse* OR TS="emergency technician*" OR TS="rescue personnel" OR TS=prehospital OR TS=pre-hospital OR TS=out-of-hospital OR TS="family physician*" OR TS="family doctor*" OR TS="primary care physician*" OR TS="primary care doctor*" OR TS="primary physician*" OR TS="primary doctor*" OR TS=(referral NEAR/2 physician*) OR TS=(referral NEAR/2 doctor*) OR TS=(referring NEAR/2 physician*) OR TS=(referring NEAR/2 doctor*) OR TS="general practitioner*"

#4 #1 AND #2 AND #3

3. Cochrane Library (Cochrane Central Register of Controlled Trials(CENTRAL))

#1: [mh ^"Myocardial Ischemia"] OR ("myocardial" NEXT isch*):ti,ab,kw OR [mh ^"myocardial infarction"] OR ("myocardial" NEXT infarction*):ti,ab,kw OR ("acute coronary" NEXT syndrome*):ti,ab,kw OR ACS:ti,ab,kw OR ("ischemic" NEXT syndrome*):ti,ab,kw OR [mh "coronary disease"] OR ("coronary" NEXT disease*):ti,ab,kw OR ("coronary artery" NEXT disease*):ti,ab,kw OR [mh "acute coronary syndrome"] OR [mh "non st elevated myocardial infarction"] OR [mh "st elevation myocardial infarction"] OR STEMI:ti,ab,kw OR STEACS:ti,ab,kw

OR STE-ACS:ti,ab,kw OR Q-wave-MI:ti,ab,kw OR "acute myocardial Infarction":ti,ab,kw OR "chest pain":ti,ab,kw OR ("unstable" NEXT angina*):ti,ab,kw OR [mh "angina, unstable"] OR ("chest" NEXT pain*):ti,ab,kw OR [mh "chest pain"]

#2: [mh aspirin] OR aspirin:ti,ab,kw OR [mh nitroglycerin] OR nitroglycerin*:ti,ab,kw OR nitroglycerin*:ti,ab,kw

#3: [mh ^"emergency medical services"] OR [mh ambulances] OR [mh "air ambulances"] OR [mh ^"transportation of patients"] OR ("emergency medical" NEXT service*):ti,ab,kw OR ("emergency" NEXT service*):ti,ab,kw OR ("ems" NEXT system*):ti,ab,kw OR "emergency health service":ti,ab,kw OR ("prehospital" NEXT emergency*):ti,ab,kw OR "Prehospital EMS":ti,ab,kw OR ("doctor" NEXT car*):ti,ab,kw OR "rapid response car":ti,ab,kw OR "rapid response vehicle":ti,ab,kw OR "helicopter emergency":ti,ab,kw OR HEMS:ti,ab,kw OR ambulance*:ti,ab,kw OR SMUR:ti,ab,kw OR physician-staffed:ti,ab,kw OR ("physician response" NEXT vehicle*):ti,ab,kw OR ("emergency medical" NEXT technician*):ti,ab,kw OR EMT:ti,ab,kw OR EMT-P:ti,ab,kw OR paramedic*:ti,ab,kw OR ("emergency" NEXT responder*):ti,ab,kw OR nurse*:ti,ab,kw OR [mh paramedics] OR ("emergency" NEXT technician*):ti,ab,kw OR [mh ^Nurses] OR "rescue personnel":ti,ab,kw OR [mh ^"Emergency Responders"] OR prehospital:ti,ab,kw OR pre-hospital:ti,ab,kw OR out-of-hospital:ti,ab,kw OR [mh "physicians, family"] OR [mh "physicians, primary care"] OR ("family" NEXT physician*):ti,ab,kw OR ("family" NEXT doctor*):ti,ab,kw OR ("primary care" NEXT physician*):ti,ab,kw OR ("primary care" NEXT doctor*):ti,ab,kw OR ("primary" NEXT physician*):ti,ab,kw OR ("primary" NEXT doctor*):ti,ab,kw OR ("referral" NEAR/2 physician*):ti,ab,kw OR ("referral" NEAR/2 doctor*):ti,ab,kw OR ("referring" NEAR/2 physician*):ti,ab,kw OR ("referring" NEAR/2 doctor*):ti,ab,kw OR ("general" NEXT practitioner*):ti,ab,kw OR [mh "General Practitioners"]

#4: #1 AND #2 AND #3