

NORMA

DA DIREÇÃO-GERAL DA SAÚDE

ASSUNTO: Abordagem Pré-hospitalar das Queimaduras
PALAVRAS-CHAVE: Queimaduras
PARA: Médicos do SNS
CONTACTOS: Departamento da Qualidade na Saúde (dgs@dgs.pt)

Nos termos da alínea a) do nº 2 do artigo 2º do Decreto Regulamentar nº 14/2012, de 26 de janeiro, a Direção-Geral da Saúde, por proposta conjunta do Departamento da Qualidade na Saúde e da Ordem dos Médicos, emite a seguinte

I – NORMA

1. A abordagem pré-hospitalar da pessoa com queimadura obriga a (vigilância primária da **ABC-DEF**) (*Nível de evidencia A, Grau de Recomendação I*) (Figura 1 do Anexo I):
 - a. Manutenção da via aérea com controlo da coluna cervical (**A** - *Airway maintenance with cervical spine control*)
 - b. Ventilação (**B** - *Breathing*)
 - c. Circulação com controlo hemorrágico e acesso venoso (**C** - *Circulation with haemorrhage control*)
 - d. Verificação do estado de consciência (**D** - *Disability: Neurological status*)
 - e. Exame da vítima com despiste de lesões associadas (**E** - *Exposure with environmental control*)
 - f. Fluidoterapia quantificada pela fórmula de Parkland (RC16) (**F** - *Fluid resuscitation*)
2. A vigilância secundária da pessoa com queimadura obriga à identificação da **AMPLE** (*Nível de evidencia A, Grau de Recomendação I*) (Figura 1 do Anexo I):
 - a. Alergias (**A** - *Allergies*)
 - b. Medicação habitual (**M** - *Medications*)
 - c. Antecedentes clínicos (**P** - *Past medical history*)
 - d. Hora da última refeição ou bebida (**L** - *Last meal or drink*)
 - e. Causa da queimadura (**E** - *Events preceding injury*)
3. Em todo o doente queimado a monitorização hemodinâmica dos seguintes parâmetros é obrigatória (*Nível de evidencia A, Grau de Recomendação I*) (Figura 1 do Anexo I):
 - a. Débito urinário
 - b. Frequência cardíaca
 - c. Estado de consciência
 - d. Saturação de Oxigénio

- e. Pressão Arterial
4. A entubação endotraqueal deve ser considerada nas seguintes situações (Figura 2 do Anexo I) (*Nível de evidência A, Grau de Recomendação I*) (Figura 2 do Anexo I):
 - a. Doentes em coma
 - b. Insuficiência respiratória
 - c. Índice de Clark ≥ 2
 - d. Intoxicação por monóxido de carbono
 - e. Queimaduras circunferenciais do tórax
5. A transferência para uma unidade hospitalar só poderá ocorrer após a (*Nível de evidência A, Grau de Recomendação I*):
 - a. Vigilância Primária e Secundária
 - b. Acesso venoso (sempre que possível)
 - c. Entubação naso-gástrica em doentes com vómitos ou em todos os doentes transportados por via aérea
 - d. Restrição da via oral
 - e. Informação clínica
 - f. Contacto prévio com hospital
6. A todos os doentes com queimaduras extensas, deve ser dado oxigénio a 100% humidificado por máscara facial, mesmo que não apresentem sinais óbvios de dificuldade respiratória (*Nível de evidência A, Grau de Recomendação I*).
7. As exceções à presente Norma são fundamentadas clinicamente, com registo no processo clínico.
8. A atual versão da presente Norma poderá ser atualizada de acordo com os comentários recebidos durante a discussão pública.

II – CRITÉRIOS

- A. Os profissionais de saúde devem providenciar a seguinte informação à população:
 - a. Na abordagem pré-hospitalar da pessoa com queimadura antes de agir deve assegurar a sua própria segurança (*Nível de evidência A, Grau de Recomendação I*).
 - b. Interrompa o processo de queimadura: ordenando que a pessoa “pare, deixe cair e enrole” (“Stop, Drop and Roll”), em seguida abafe com cobertor ou extinga o fogo com água (*Nível de evidência A, Grau de Recomendação I*) (Esquema 2 do Anexo II).
 - c. No caso das queimaduras elétricas não toque na vítima, proceda sim à interrupção imediata da fonte de eletricidade (*Nível de evidência A, Grau de Recomendação I*) (Esquema 2 do Anexo II).

- B. Em todas as situações deverá remover o vestuário não aderente, adereços e adornos mas não tente remover alcatrão. Se suspeitar de lesão cervical ou coluna vertebral imobilizar o doente (*Nível de evidencia A, Grau de Recomendação I*).
- C. No caso de queimaduras causadas pelo frio ou escaldões recorra a irrigação imediata em água corrente (8 a 15 graus C) durante pelo menos 20 minutos (*Nível de evidencia A, Grau de Recomendação I*).
- D. Nas queimaduras químicas deve ser, igualmente, realizada a irrigação com água corrente, à exceção das queimaduras por cal viva (*Nível de evidencia A, Grau de Recomendação I*) (Esquema 2 do Anexo II).
- E. Para parar o processo da queimadura considerar a utilização de água até 15 graus Celsius (morna) durante cerca de 15/20 minutos. Inicie sempre o arrefecimento com água e nunca utilize gelo.
- F. Se tiver havido um atraso no início do arrefecimento, este ainda deve ser iniciado até três horas após a queimadura.
- G. Cremes tópicos ou qualquer outro apósito não devem ser aplicados dado que podem interferir com a avaliação posterior.
- H. Evite a hipotermia: mantenha o doente queimado normotérmico (*Nível de evidencia A, Grau de Recomendação I*).
- I. Após o arrefecimento, cubra as queimaduras com um lençol limpo ou esterilizado, compressas húmidas esterilizadas, ou uma manta isotérmica que pode ser utilizada como cobertura temporária antes da avaliação (*Nível de evidencia A, Grau de Recomendação I*).
- J. A entrada direta de calor nas vias aéreas superiores pela exposição a gases quentes e fumos, resulta na formação de edema, que pode obstruir a via aérea.
- K. A obstrução da via aérea superior pode ocorrer rapidamente após a queimadura assim sendo o estado respiratório deve ser monitorizado, para avaliar a necessidade de entubação e/ou ventilação.
- L. A Rouquidão progressiva é um sinal de obstrução da via aérea e a entubação endotraqueal precoce deve ser equacionada, antes da constituição do edema e alteração da anatomia da área.
- M. O índice de Clark calcula-se de acordo com a seguinte tabela:

| Critério | Pontuação |
|--------------------------|-----------|
| Espaço Fechado | 1 |
| Dispneia | 1 |
| Alteração de Consciência | 1 |
| Rouquidão | 1 |
| Queimadura Facial | 1 |
| Expetoração Carbonácea | 1 |
| Fevores/Alt. Auscultação | 1 |
| Total | 7 |

- N. Um índice de Clark ≥ 2 implica forte suspeita de lesão inalatória e deverá ser considerada a entubação endotraqueal.
- O. A pressão arterial indireta é um índice pouco fiável da avaliação do estado cardiovascular num doente queimado, devido às alterações fisiopatológicas compensadoras. A medida da pressão arterial pode ser, ainda, difícil de obter, devido ao edema das extremidades.
- P. Perturbações de consciência podem indicar traumatismos cranianos, intoxicações por monóxido ou dióxido de carbono, edema cerebral, hipoxémia ou hematoma cerebral.
- Q. Nunca se deve retardar um transporte de uma pessoa queimada só porque não se consegue um acesso vascular e/ou outro procedimento, desde que não seja indispensável à manutenção das funções vitais.

III – AVALIAÇÃO

- A. A avaliação e implementação da presente Norma é contínua, executada a nível local, regional e nacional, através de processos de auditoria interna e externa.
- B. A Direção-Geral da Saúde, através do Departamento da Qualidade na Saúde, elabora e divulga relatórios de progresso de monitorização.
- C. Enquanto não estiver concluída a parametrização dos sistemas de informação para a monitorização e avaliação da implementação e impacto da presente Norma, os hospitais, ao abrigo do Despacho nº 17069/2011 do Secretário de Estado da Saúde, terão de monitorizar os seguintes indicadores de avaliação:
 - a. Percentagem de doentes admitidos no serviço de urgência (SU) com diagnóstico de queimadura.
 - i. Numerador: Número de doentes admitidos em SU com diagnóstico de queimadura;
 - ii. Denominador: Número de doentes admitidos em SU.

IV – FUNDAMENTAÇÃO

- A. A queimadura é inicialmente um traumatismo local, mas esta patologia evolui rapidamente para um fenómeno geral. É assim necessária uma abordagem inicial das queimaduras com protocolos rigorosos que tenham em conta a sua fisiopatologia, no sentido de diminuir a morbidade e mortalidade.
- B. As primeiras 8 horas pós-queimadura são as mais importantes na recuperação do edema inicial e subsequente choque hipovolémico que se forma imediatamente após a queimadura. A primeira abordagem do doente queimado condiciona desta forma fortemente a evolução e o prognóstico destes doentes.
- C. Conseguidas as primeiras medidas de estabilização das funções vitais e dos cuidados locais com a queimadura, torna-se imperioso. Uma reposição volémica adequada como primeira medida a tomar.
- D. Depois de uma avaliação da gravidade da queimadura, protocolos rigorosos devem ser seguidos quer para a transferência, quer para o tratamento subsequente destes doentes.

Esta Norma pretende uniformizar de forma correta os cuidados pré-hospitalares do doente queimado, diminuindo os efeitos do traumatismo local e a progressão da lesão, bem como minimizando os efeitos gerais no organismo que invariavelmente as queimaduras provocam.

V – APOIO CIENTÍFICO

- A. A presente Norma foi elaborada pelo Departamento da Qualidade na Saúde da Direção-Geral da Saúde e pelo Conselho para Auditoria e Qualidade da Ordem dos Médicos, através dos seus Colégios de Especialidade, ao abrigo do protocolo entre a Direção-Geral da Saúde e a Ordem dos Médicos, no âmbito da melhoria da Qualidade no Sistema de Saúde.
- B. Zinia Serafim e Celso Cruzeiro (coordenação científica), Anabela Coelho (coordenação executiva), Maria Angélica Almeida, Jorge Reis, António Bessa Monteiro, Miguel Soares de Oliveira.
- C. Foram subscritas declarações de interesse de todos os peritos envolvidos na elaboração da presente Norma.
- D. Durante o período de discussão pública só serão aceites comentários inscritos em formulário próprio, disponível no *site* desta Direção-Geral, acompanhados das respetivas declarações de interesse.
- E. Os contributos recebidos das sociedades científicas e sociedade civil em geral, sobre o conteúdo da presente Norma, serão analisados pela Comissão Científica para as Boas Práticas Clínicas, criada por Despacho n.º 12422/2011 de 20 de setembro e atualizado por Despacho n.º 7584/2012 de 1 de junho.

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Anexo I – Algoritmos de decisão

Figura 1: Atuação geral

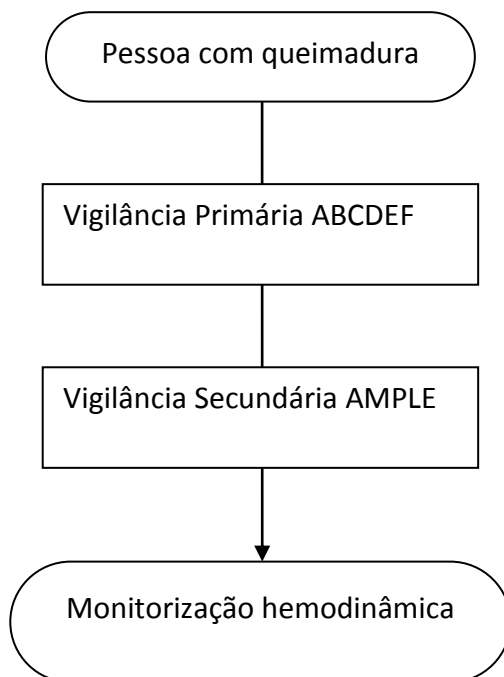
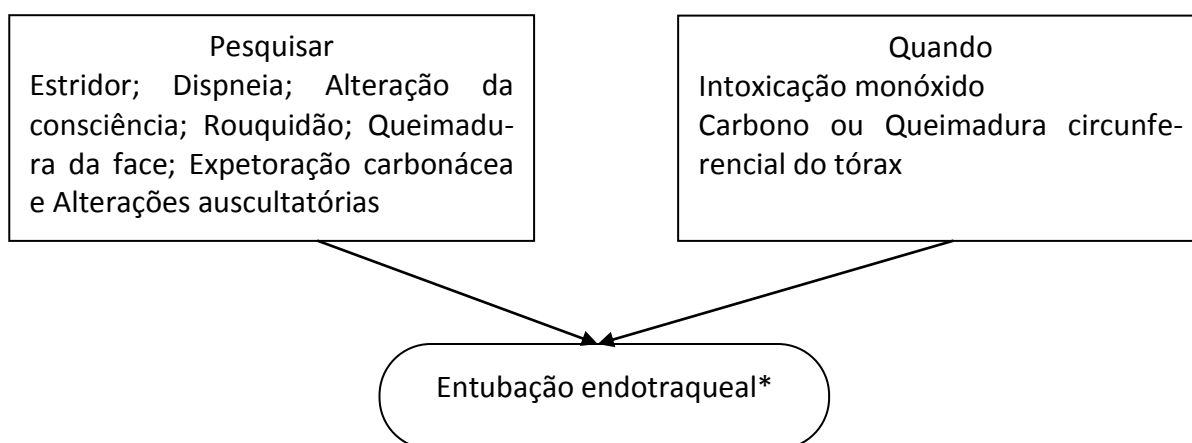


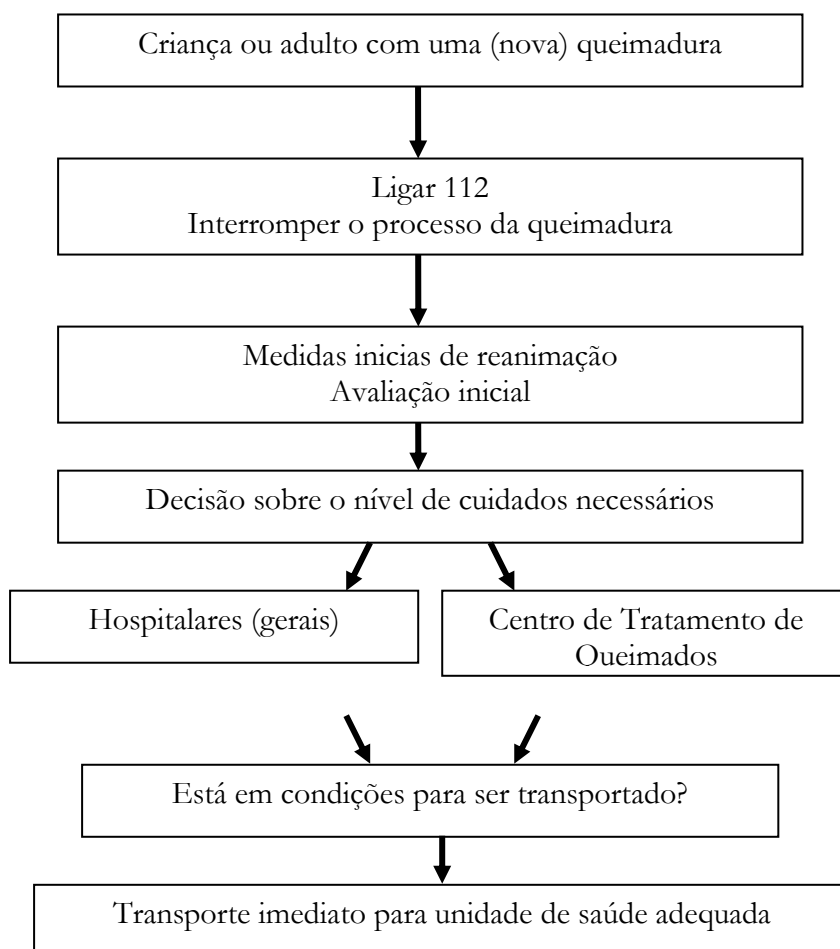
Figura 2: Entubação endotraqueal



*tendo em conta a análise de risco - benefício para o doente.

Anexo II – Esquemas

Esquema 1: Primeiro contato



Esquema 2: Parar o processo da queimadura

