BONNES PRATIQUES EN ENDOSCOPIE SOUPLE (DIAGNOSTIC)

L'endoscopie bronchique souple est une procédure diagnostique importante qui peut être réalisée en sécurité chez des patients ambulatoires. Dans une grande étude multicentrique prospective de 2009 portant sur plus de 20 986 procédures, le taux de complications sévères était de 1,1% et la mortalité de 0,02 (1).Les principaux évènements rapportés sont des troubles du rythme cardiaque, hémorragies minimes ou sévères, bronchospasmes/laryngospasmes, toux, dyspnée, désaturations, défaillance cardio-respiratoire, pneumothorax, œdèmes pulmonaires. Dans des études prospectives plus petites, le taux de complications est plus élevé avec 7% pour Hehn *et al* (4,3% respiratoires, 2,8% de non-respiratoire) et plus de 30% pour Bechara *et al* (dont 8%de sévères) (2,3) .Cet examen diagnostique ne semble pas plus à risque chez les personnes agées de plus de 65 ans, voire de plus de 85 ans (4). De nombreux facteurs peuvent influencer le risque de complications, et inclus ceux inhérents au patient et ceux inhérent à la procédure elle-même (sédation, type de prélèvement réalisé …). L'utilisation d'une check-list avant la procédure permet d'identifier de possibles risques de complication (annexe 1).
Pour aider les pneumologues dans leur pratique, plusieurs sociétés savantes ont édité des recommandations de bonnes pratiques pour l'endoscopie bronchique souple diagnostique (5–8).

1. L'hypoxie

Il est habituel de constater une baisse significative de la saturation lors d'une endoscopie bronchique, qui peut débuter au moment de l'anesthésie, se majorer au moment du passage des cordes vocales et qui est plus importante en position assise, lors de l'utilisation d'aspiration, lors des prélèvements ou en cas de prémédication avec des benzodiazépines (9–13).L'hypoxie est le plus souvent transitoire et sera significative si elle se prolonge plus d'une minute. Elle est plus fréquente en cas de baisse du peakflow (inférieur à 60% de la théorique) ou du VEMS inférieur à 1litre et en cas de présence d'une hypoxie avant le geste (13).
Habituellement l'hypoxie est corrigée par l'apport d'oxygène par voie nasale ou pharyngée au débit de 2 à 4 litres par minute (11,14).

Recommandations

- Pendant une endoscopie bronchique le patient doit être surveillé en continu au saturomètre.
- Une supplémentation en oxygène doit être administrée en cas de désaturation de moins de 4% ou sat < 90% de plus de 1 minute pour réduire les risques de complications dus à l'hypoxie.
- Ces complications sont corrélées à la saturation initiale, la fonction respiratoire, les comorbidités, la sédation, et le type de prélèvement.

2. Les risques cardiaques

L'hypoxie survenant lors d'une endoscopie bronchique est classiquement à l'origine d'une augmentation de fréquence cardiaque (environ 40% de la fréquence de base), de la pression sanguine (environ 30% de la base), et de l'index cardiaque. Cependant, les troubles du rythme sévères pendant une endoscopie sont rares et semblent liés à une ischémie myocardique lors d'hypertension (15,16).
Les tachycardies sinusales sont fréquentes pendant l'endoscopie (14).Les arythmies atriales surviennent à n'importe quel moment de la procédure alors que les arythmies ventriculaires sont plus fréquentes au moment du passage de cordes vocales et lors d'hypoxie (17).
L'augmentation de la pression systolique et de la fréquence cardiaque pendant l'endoscopie est associée à une modification ECG dans 15% des cas (segment ST, bloc de branche) et corrélé à l'âge élevé et au nombre de paquet-années plus qu'à l'hypoxie ou à la fonction respiratoire (16). Un infarctus du myocarde récent de moins de 4- 6 semaines est considéré comme une contre-indication à l'endoscopie. Dweik *et al.* ont analysé

rétrospectivement l'évolution de 20 patients ayant bénéficiés d'une endoscopie dans les 30 jours après un IDM avec un patient décédé par nécrose active au moment de la procédure (18). Dans une autre étude rétrospective en unité de coronarographie, il n'y avait pas de différence du taux de complications pendant l'endoscopie entre les patients ayant un IDM et ceux qui n'en avait pas (19).

Recommandations

- En cas de risque élevé d'arythmie, la saturation en oxygène, la tension artérielle et la fréquence cardiaque doivent être optimisées et une surveillance post-endoscopie doit être prévue.
- L'avis du cardiologue peut être utile en cas de pathologie cardiaque connue, et nécessaire si l'endoscopie est indiquée alors qu'un IDM est récent de moins 4 semaines.
- Dans l'idéal, l'endoscopie doit être réalisée au moins 4 semaines après un IDM.

3. Le risque hémorragique

Les saignements sont rares au cours des bronchoscopies souples et le plus souvent minimes (risque global de 0,9%, augmenté à 1,9% en cas de de biopsies) (20). Ils sont sévères (supérieur à 100ml) dans 0,26% des cas (1).

3.1 Facteurs de risque liés à la procédure ou au patient :

Les facteurs de risque de saignement sont multiples avec des facteurs dûs à la procédure endoscopique et au type de prélevement réalisé, et ceux inhérents au patient lui-même ainsi qu'au type de tissu prélevé (21) :

- Facteurs liés à la procédure endoscopique /prélèvement réalisé :
  Le risque de saignement pendant une bronchoscopie est lié au type de prélèvement réalisé (20,22–24).
  Le risque de saignement le plus élevé est pour les biopsies transbronchiques à la pince, suivi par l'endoscopie thérapeutique (laser Yag, argon-plasma, electocoagulation, pose de prothèse), les biopsies endobronchiques, les prélèvements transbronchiques à l'aiguille (TBNA) et enfin le lavage bronchoalveolaire et l'exploration simple.
  Le risque de saignement est plus important pour des lésions de type carcinoïde, localisations secondaires rénales, thyroidiennes, amylose (21).
  De façon générale, plus de 80 % des saignements en bronchoscopie souple sont résolutifs de façon spontanée ou après traitement local par vasoconstricteurs (5,25).
  La réalisation systématique d'un bilan de coagulation pré-procédure, n'a pas montré son utilité pour la prévision des risques de saignements (5,8,25,26). **Il est par contre recommandé de réaliser un bilan de coagulation avec numération de plaquettes en cas de présence de plusieurs facteurs de risque, suivant la procédure prévue** (27).
- Facteurs de risque liés au patient :
  - Un traitement anticoagulant ou antiagrégant plaquettaire,
  - Une pathologie hépatique,
  - Une insuffisance rénale chronique,
  - Une insuffisance cardiaque,
  - L'hypertension pulmonaire,
  - L'immunodépression,
  - La mise en évidence d'une histoire personnelle ou familiale de risque hémorragique, ou une histoire hémorragique récente avec nécessité de transfusion,
  - et l'existence d'une thrombopénie (5,28–31).

  Dans ce cas- là, le risque de saignement pendant l'endoscopie est de 11% avec, en majorité, des saignements minimes ou modérés et 3% de saignements sévères (supérieurs à 100ml) (25,32). En général, un taux de plaquettes supérieur à 50 G/L est requis pour la plupart des gestes invasifs (32). Il

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