4 Indications

4.1 *Diagnostic et Staging des CBNPC*

Il s'agit de la principale indication de l'écho-endoscopie bronchique. La sensibilité de cette technique est rapportée par Silvestri et al. à 89% (46 à 97% selon les études) avec une valeur prédictive négative de 91% (103).

Les performances limitées du scanner et du TEP scanner pour détecter les métastases médiastinales (104) imposent le recours à un staging mini-invasif ou invasif. En effet, 30% des patients cN1 au TEP sont en réalité pN2-N3 (105) ; la valeur prédictive négative du TEP pour les tumeurs > 3 cm est de 89% (106). Par ailleurs 21,6% des tumeurs centrales classées cN0 au TEP sont en réalité pN2 (107).

Pour les patients sans métastases à distance, Il est donc recommandé de réaliser une écho-endoscopie de staging dans les cas suivants et si elle est susceptible de changer la stratégie thérapeutique :

- Adénopathies médiastinales élargies au scanner et/ou TEP scanner positif
- Adénopathies médiastinales normales au scanner et positives au TEP scanner
- Ganglions médiastinaux normaux et non fixants au TEP si :
    - Tumeurs N1 au scanner et/ou TEP scanner,
    - Tumeur centrale,
    - Tumeur de plus de 3 cm surtout s'il s'agit d'un adénocarcinome fixant hautement le FDG (106).

Si la suspicion d'atteinte ganglionnaire reste élevée après une écho endoscopie négative ou non contributive, du fait d'une valeur prédictive négative variant avec la prévalence, et des meilleures performances de l'association écho-endoscopie bronchique + médiastinoscopie versus médiastinoscopie seule, il est recommandé de réaliser un staging chirurgical (83,103).

L'écho-endoscopie bronchique est également recommandée comme méthode diagnostique pour les patients présentant une tumeur avec envahissement médiastinal si elle constitue la technique disponible la moins invasive (61).

L'écho-endoscopie bronchique est indiquée pour le diagnostic de tumeur pulmonaire ayant un contact avec l'arbre bronchique (108–110).

OPTION : un staging médiastinal par écho-endoscopie bronchique pour les patients candidats à une radiothérapie stéréotaxique (111–114)**.**

4.2 *Echoendoscopie bronchique et oesophagienne combinées (EBUS + EUS)*

Compléter l'écho-endoscopie bronchique par une écho-endoscopie oesophagienne permet un staging médiastinal complet en accédant aux stations 8,9 (plus rarement 5 et 6), au cours du même geste. Les stations 2L, 4L et 7 sont facilement accessibles, 2R et 4R plus difficilement. La technique combinée améliore de 13% la sensibilité du staging par rapport à l'écho-endoscopie bronchique seule.

La sensibilité de l'EBUS+EUS suivie d'un staging chirurgical est supérieure au staging chirugical seul (115). En cas de négativité de l'EBUS+EUS, un staging chirurgical est recommandé, si la suspicion d'atteinte ganglionnaire est forte (116).

Lorsque les techniques combinées ne sont pas accessibles, l'écho-endoscopie bronchique seule est recommandée (116).

4.3 *Re-staging des CBNPC*

L'écho-endoscopie bronchique peut permettre de ré-évaluer le médiastin après un traitement d'induction. Du fait d'une valeur prédictive négative très variable selon les études, une écho-endoscopie bronchique négative nécessite une confirmation par une technique chirurgicale (83).

La séquence diagnostique pourrait être la réalisation d'une écho-endoscopie bronchique de staging, et une médiastinoscopie de re-staging après un traitement d'induction (83).

SOMMAIRE

4.4 Diagnostic des CBPC

L'écho-endoscopie bronchique est un examen performant pour le diagnostic des carcinomes neuroendocrines à petites cellules. Sa sensibilité varie de 92 à 97,2% en fonction de la prévalence de la pathologie (117).

Recommandations

- Pour les patients sans métastases à distance, Il est recommandé de réaliser en 1ère intention une écho-endoscopie bronchique de staging +/- EUS dans les cas suivants :

- **Adénopathies médiastinales élargies au scanner et/ou TEP scanner positif**
- **Adénopathies médiastinales normales au scanner et positives au TEP scanner**
- **Adénopathies médiastinales normales au scanner et non-fixantes au TEP scanners si :**
  - **Tumeurs N1 au scanner et/ou TEP scanner**
  - **Tumeur centrale**
  - **Tumeur de plus de 3 cm surtout s'il s'agit d'un adénocarcinome fixant hautement le FDG**

- Une écho-endoscopie négative ou non contributive doit être confirmée par une technique de staging chirurgical

OPTION : L'écho-endoscopie bronchique peut être réalisée pour le re-staging, mais doit être vérifiée par une technique chirurgicale si elle est négative.

5 Complications

L'écho-endoscopie bronchique est une technique sûre avec peu de complications rapportées (<1%) : pneumothorax, abcès pulmonaire, médiastinite, hémopneumomédiastin et 2 décès rapportés dans la littérature (83,118,119).

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DECLARATION DES LIENS D'INTERETS

Les personnes ci-dessous ont déclaré des liens d'intérêt en oncologie thoracique pour des participations à des congrès, séminaires ou formations ; des bourses ou autre financement ; des rémunérations personnelles ; des intéressements ; ou tout autre lien pertinent dans les 3 dernières années :

ARPIN D : Takeda, Roche
AUDIGIER-VALETTE C : Roche, Abbvie, BMS, MSD, Takeda, Boehringer, AstraZeneca, Pfizer, Novartis, Fabre, Amgen, Lilly
AVRILLON V : BMS, Abbvie.
BARANZELLI A. : Roche, Takeda, BMS, MSD
BAUD M. : Boehringer
BAYCE BLEUEZ S. : Roche, BMS, AMGEN
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BERNARDI M. : BMS, Sandoz, Roche
BOMBARON P : Roche, AstraZeneca, BMS, Boehringer.
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JACOULET P : Boehringer
JANICOT H. Boehringer
LARIVE S. : TEVA Santé, Pfizer, Boehringer, BMS, MSD, AstraZeneca.
LE TREUT J. : AstraZeneca, Boehringer, Roche, BMS, MSD
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WATKIN E. : MSD, AstraZeneca, Boehringer, Pfizer, Roche, BMS
ZALCMAN G. : Roche, AstraZeneca, BMS, Pfizer, Novartis, Abbvie, MSD, Boehringer, GSK, Inventiva

Les autres participants et membres des groupes de travail n'ont déclaré aucun lien d'intérêt en oncologie thoracique.
Aucun participant ou membre d'un groupe de travail n'a rapporté de lien d'intérêt avec l'industrie du tabac.

MENTIONS LEGALES

La réunion de mise à jour des référentiels (édition 2019) a été organisée par l'Association de Recherche d'Information Scientifique et Thérapeutique en Oncologie Thoracique (ARISTOT).
Les partenaires institutionnels 2019 d'ARISTOT sont : **Amgen, Astra Zeneca, Boehringer Ingelheim, Chugai, Pfizer, Roche**.

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