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RESEARCH ARTICLE

TWO PULMONARY MASS REVEALING A RHEUMATOID ARTHRITIS DEUX MASSES PULMONAIRES REVELANT UNE POLYARTHRITE RHUMATOÏDE.

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Abstract

The lung infringement (achievement) within the framework of the rheumatoid polyarthritis is varied, we bring back (report) the observation of a patient who presents hémoptysies revealing two tissular lung masses from which the histological diagnosis ends in a rheumatoid polyarthritis

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Introduction:

The lung is the most frequent extra-articular localization of the rheumatoid polyarthritis, the respiratory impairment could concern a sick person on two during the evolution of its disease, that it is about acute or chronic, infectious or medicinal specific respiratory manifestation.

Case Report:

It is about 58-year-old Mrs M.H, without pathological histories or toxic habits. The beginning of the symptomatology went back to 11 months before its hospitalization by the progressive installation of a hacking cough, associated with several episodes of hemoptysis of low abundance, with a right pain basithoracic to type of cramp, moderate intensity. This board was preceded, three years previously, by early diffuse inflammatory polyarthralgia without steepness articular or deformation. The whole evolving in a context of weakening of the general state. The pleuropulmonary examination was normal, besides, the osteoarticular examination found a pain in the pressure of the proximal interphalangeal and the métacarpo-phalangeal, symmetric, both hands without articular deformation, a tumefaction of both wrists with pain in the pressure of the ulnar apophyse without sign of touch of piano, the examination also found a limitation of the active and passive movements of wrists and small articulations of both hand, besides nodules under cutaneous mobile compared to both olécranes. The thoracic radiography of face objectified an opacity with projection under hilaire left in band, and an opacity swamping with bottom of right cardiophreniccul de sac (Figure1). The thoracic Scanning showed two lung masses of tissular density lower lobar right and left of 5cm and 3cm of main line respectively (Figure2). The data of the clinical examination made evoke easily the diagnosis of a rheumatoid polyarthritis but the thoracic radiological picture made discuss rather the diagnoses of the bronchial cancer, the lung metastases of an extrathoracic cancer or a tubercular infection in its pseudotumoral shape. The immunological assessment was normal. He involved the dosage of the factor rheumatoid, antibodies anti CCP and antinuclear antibodies. The radiographies of both hands and wrists had not objectified a carpite of erosion or geodes. The flexible bronchoscopy objectified an inflammatory state with bleeding coming from the left fowler and an aspect infiltrated spur of division of the right basal pyramid. The bronchial biopsies were inflammatory without sign of the wickedness. In the fear of the wickedness, the draining transparietal

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biopsy of the right lung mass was indicated and highlighted chronic inflammatory with a reaction histiocytair in fence, associated to epithelioid and huge cells centered by a necrosis fibrinoide, compatible histologically with a nodule rheumatoid. The respiratory function in the pléthysmography was normal. In front of the articular infringement (achievement) evolving for more than six weeks, C- reactive protein and sedimentation rate raised, the histological data, the diagnosis of seronegative polyarthritis rheumatoid with pulmonary involvement was retained. Our patient was put under méthotrexate associated with a oral corticosteroid therapy at the dose of 1 mg / kg / day for six weeks then progressive degression during six months. We noted a very good radiological and clinical evolution.

Discussion:-

The Rheumatoid arthritis (RA) is characterized by an articular manifestation infringement bilateral and symmetric distal, of chronic, destructive and warping evolution. She is of indefinite origin, associated with an activation of the system immune and responsible for a specific inflammation, testifying of the systematic character of the disease. Indeed, approximately 50 % of patients will present extraarticular demonstrations [1]. Among these, the lung is the most frequent. She can precede the systematic manifestation in 10 on 20 % of the cases [2, 3]. The specific lung hurts of PR are heterogeneous to know the diffuse interstitial rheumatoid pneumopathie, the nodule, the bronchiolitis, the dilations of bronchi, and the pleural manifestation. We are interested here in the nodulaire infringement (achievement); nodules are of number and variable size. They are better detectable in the high-resolution thoracic scanning (20-25 %) compared with the thoracic radiography (1 %). These nodules prevail in the superior lobes, the regions under pleural and along fissures. It is the patients male smokers with nodulaire infringement under cutaneous that are at greater risks to develop nodules rheumatoid. However, our female, not hazy patient presented nodules under cutaneous with tissular masses and not nodules to the lung scanner, sitting rather in bottoms. All in all, neither cuts her lung masses and nor their seat was suggestive of rheumatoid arthritis in this observation. The RA has a unique translation histopathologique established by a hyperplasielymphoplasmocytaire and macrophagique particular, common to the synovial pannus, to the nodules under cutaneous but also to three compartments of the respiratory system (pleura, parenchyme and air traffics). The histology is necessary only in case the diagnosis is not so obvious and especially not to cross next to the bronchial carcinoma main diagnosis differential as it was the case at our patient. The clinical expression of these hurts in the one and/or the other organ will depend on the character more at least Florida of the infiltration of immuno inflammatory cells and individual predispositions still badly known [4; 5]. The distribution(casting) of the hyperplasielymphoïde is such as the hurts can interest any compartment of the respiratory system, to coexist at the same patient's and to vary in time, explaining the clinical polymorphism of the lung rheumatoid [3,4]. The lung infringement is symptomatic only by its complications: excavation and fistulisation in bronchi at the origin of hémoptysies as it is the case at our patient; transplant aspergillaire or in mycobactéries necrosis and excavation in the pleura at the origin of pleural effusion, pneumothorax or pyothorax [3]. The lung anomalies are infracliniques and infraradiologiques to 50 % of the patients, and symptomatic that once on ten[5]. In the imaging, the thoracic TDM shows unique or multiple nodules, rounded of opacities, sometimes excavated, from 5 to 30 mm in diameter, affecting rather the lung periphery and the apexes. If the nodule is unique, the differential diagnosis is the one of a bronchopulmonary cancer; if nodules are multiple, it is necessary to exclude the opportunist infections, especially if they are excavated [5]. A restrictive syndrome is observed at 5-15 % of the patients but reduction in distribution of the carbon monoxide (CO) is observed at more than 50 % of the sick [5; 6]. The tobacco plays a role in the appearance of the disease in its evolution and in the resistance the treatment. The factor rheumatoid is twice as frequent at the smoker's. This type of patient is for three times more risk of having extra-articular appearances [6]. The rule is to treat the symptomatic patients or who deteriorate in the functional drawing a corticosteroid therapy is proposed in the dose from 0,75 to 1 mg / hanging kg / day for four in six weeks, then in decreasing doses by watching the patient clinically, functionally and on the imaging and in TDM. But the corticosteroid therapy remains in certain cases ineffective of where the interest of immunosuppresseurs, anti TNF alpha and other promising targeted therapies in the resistant forms [7; 8].

Conclusion:-

Our observation underlines the technical difficulties to support the diagnosis of a lung rheumatoid. A rigorous diagnostic approach allows not to underestimate a lung cancer. Without forgetting that the lung infringement is frequent, varied and can influence the functional and vital forecast.



Figure 1:-Thoracic radiography of face: opacity filling the bottom of right bagcardiophrénique with opacity in band left under hilaire

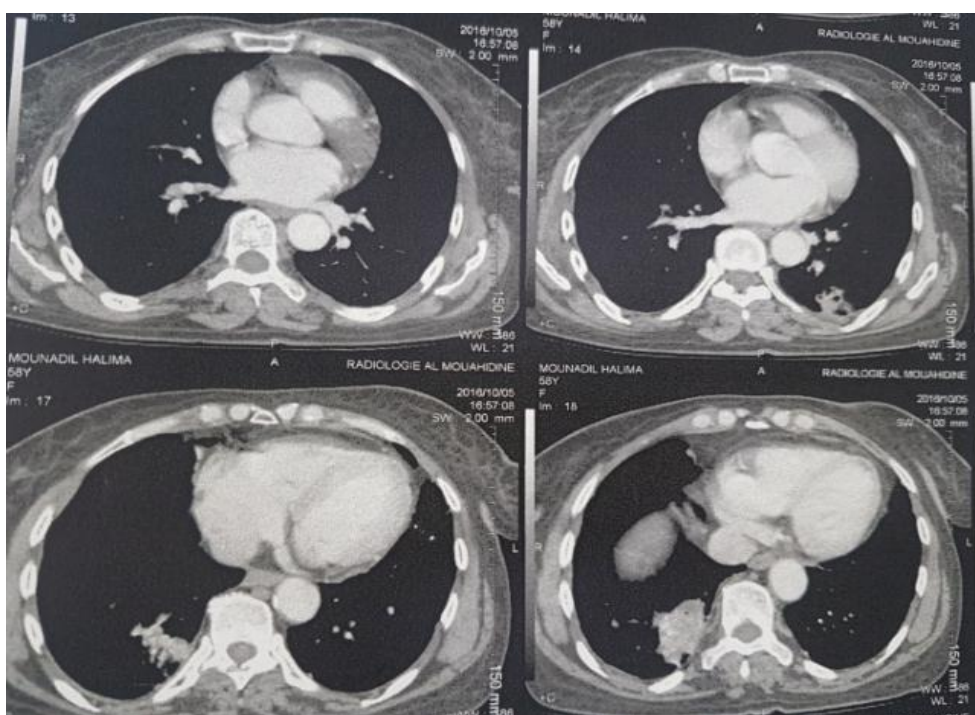


Figure 2:-Thoracic TDM: two masses of tissular density lower lobaires right and left

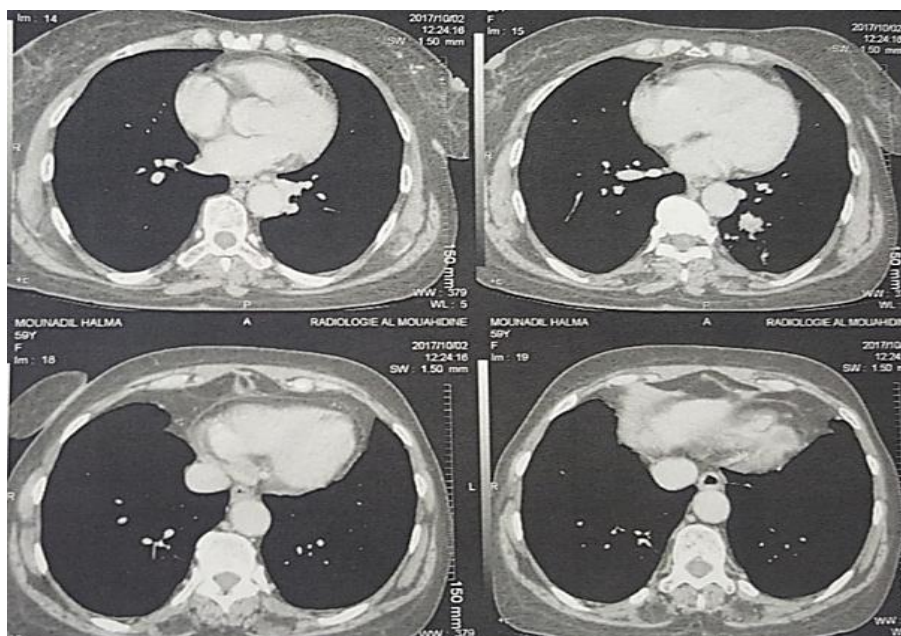


Figure 3:-Thoracic TDM: almost complete radiological cleaning after treatment.

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