

Diagnostic approach to COVID-19 pneumonia (SARS-CoV-2) at Angeles Lomas Hospital

Abordaje diagnóstico de neumonía por COVID-19 (SARS-CoV-2) en el Hospital Ángeles Lomas

Horacio Lozano Zalce,* Ángel César Chávez Alanís,* Ignacio Gustavo Álvarez Valero,[‡] Ximena Ochoa Morales,[‡] Raymundo Rodríguez Sandoval,[§] Pilar Escamilla Llano^{||}

Since the beginning of the pandemic of COVID-19 pneumonia (SARS-CoV-2) at the end of last year, the first case in Mexico was reported in the last week of february 2020. In the period from march 4th to 31th, 550 rt-PCR (reverse transcription-polymerase chain reaction) tests were performed in our Hospital, of which 128 were positive (23%). The first case diagnosed in our Hospital was on march 4th. This case, as

Table 1: Findings computed tomography.		
	Global frequency (%	Hospital Angeles Lomas frequency (%)
Ground-glass opacity Consolidation Crazy-paving pattern Linear Cavitation Non-calcificated nodules Pleural effusion Lymphadenopathy Bilateral distribution	86 29 19 14 0 0 0 0 0 76	97 25 13 12 0 2 0 0 0 60
Peripheral distribution	33	91

* Radiology Department.

[‡] Emergency Room.

§ Infections Commitee.

Molecular Biology.

Hospital Ángeles Lomas.

Correspondence: Horacio Lozano Zalce E-mail: hlozanozalce@gmail.com

Accepted: 2020-08-04.

www.medigraphic.com/actamedica



well as the first 51 remaining, were imported cases (individuals presenting clear antecedent of having been in affected geographical areas: Italy, Spain, United States and Korea). The rest of the 80 patients with positive tests (that is 28 cases),



Figure 1: Crazy-paving pattern (arrow) and ground-glass pattern (star); linear opacities also coexist.



Figure 2: Consolidation. Virtually the entire lower left lobe is affected.

were already considered as community acquired infections: 44 women and 36 men (55 and 45%, respectively), the age varied between 10 and 80 years (with an average of 44.3 years).

Eighty of the 128 patients (63%) met clinical criteria that required chest computed tomography (CT). Of the total 80 CT scans, 45 were abnormal and 35 were normal (55 and 45%, respectively). The *Table 1* compares the most frequent tomographic findings that have been reported in the world literature and ours.

CONCLUSIONS

CT is a highly sensitive but not specific tool for diagnosing SARS-CoV-2. It has the advantage of providing results in minutes in contrast to days of the rt-PCR test. In our series, we agree that the most frequent data is the "ground-glass" opacity, however, we found that the peripheral distribution is 260% more frequent in our population than the global data.

This article is a preliminary (pre-printed) version of the final work; the latter will be published in the issue 2 of 2020 of Acta Médica.