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JUSTIFICATION OF THE USE OF CT FOR INDIVIDUAL HEALTH ASSESSMENT OF ASYMPTOMATIC PEOPLE

Current Status in Latin America

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Latin América

20 countries, 17 from the Americas and 3 from the Caribbean region

Almost 600 million inhabitants

A non uniform region: great ethncial, political, economical, cultural and social differences

Inequality and poverty are the main challenges of the region
Radiology Practice in LA

Great variability among countries (reflection of political, economical, social and cultural issues)

- Infrastructure / technology
- Human workforce
- Training programs
- Sub specialization
- Legal frameworks and regulations
- Quality assurance programs

Great variability within each country

- Urban vs. rural
- High vs. low income
- Private vs. public healthcare

Resources mainly concentrated in large urban center
Radiology Practice in LA

Current status of the use of CT for IHA of asymptomatic people

Source of information
Survey to leadership of 18 national radiological societies of Latin American

All Latin American countries except Paraguay and Cuba
Content of Survey (based on HERCA survey 2013)

• To your knowledge, in your country, are CT examinations on asymptomatic individuals outside screening program being performed?

• Does your current regulation mention exposure to asymptomatic individuals?

• Do your Authorities actively search for the existence of these practices?
Content of Survey (based on HERCA survey 2013)

• Is it or would it be allowed from a legal point of view / tolerated in your country?

• Are CT examinations on asymptomatic individuals outside screening program reimbursed by the national health and pensions organization or by private insurance companies?

• Are you aware of some kind of advertisement on this service in your country? If yes, does it seem to you that it is a small or large scale phenomenon?
Results: 18 /18 answers

- Argentina
- Bolivia
- Brazil
- Chile
- Colombia
- Costa Rica
- Dominican Republic
- Ecuador
- El Salvador
- Guatemala
- Honduras
- Mexico
- Nicaragua
- Peru
- Panama
- Puerto Rico
- Uruguay
- Venezuela
To your knowledge, in your country, are CT examinations on asymptomatic individuals outside screening program being performed?

- Argentina
- Brazil
- Chile
- Dominican Republic
- El Salvador
- Colombia
- Mexico
- Nicaragua
- Peru
- Venezuela

- Yes, 11
- No, 7

- Very low scale
- Only in private medicine.
- Mainly for lung cancer and coronary artery disease; less frequently for colorectal cancer

- Bolivia
- Costa Rica
- Ecuador
- Guatemala
- Honduras
- Panama
- Uruguay
Does your current regulation mention exposure to asymptomatic individuals?

- Only in one country (Mexico) regulation limits exposure solely to symptomatic individuals.

- Rest of the countries: regulation mentions ALARA principle, and it remains to physicians (clinicians and radiologists) to decide who is exposed; no specific mention is done regarding presence or absence of clinical signs or symptoms.
Do your Authorities actively search for the existence of these practices?

- In no country authorities actively search for the existence of these practices (due to lack of regulation?)
Is it or would it be allowed from a legal point of view, or tolerated in your country?

Countries in which CT is performed as part of IHA:
- Brazil
- Argentina
- Chile
- Dominican Republic
- El Salvador
- Colombia
- Mexico
- Nicaragua
- Peru
- Venezuela

Countries in which CT is not performed as part of IHA:
- Bolivia
- Guatemala
- Costa Rica
- Ecuador
- Honduras
- Panama
- Uruguay
Is it or would it be allowed from a legal point of view, or tolerated in your country?

Countries in which CT is performed as part of IHA

Even if there is no specific legislation there is a general belief that the use of CT for IHA would be allowed from a legal point of view.

In 5 of the 7 countries in which CT is no used for IHA think that it would be tolerated and/or legally allowed
Are CT examinations on asymptomatic individuals reimbursed by the national health and pensions organization or by private insurance companies?

11 countries in which CT is performed for IHA

- Argentina
- Dominican Republic
- Nicaragua
- Venezuela

Yes, 4

No, 7

- Brazil
- Chile
- El Salvador
- Colombia
- Mexico
- Peru
- Puerto Rico

In practical terms to allow reimbursement private insurance companies request a medical justification by the referral…

Private programs for early disease detection (lung cancer, CRC, and coronary artery disease) offer “low cost” CT examinations as part of the program, but they are not reimbursed.
Are you aware of some kind of advertisement on this service in your country?

11 countries in which CT is performed for IHA

- Brazil
- Dominican Republic
- Mexico
- Nicaragua
- Puerto Rico

- Argentina
- Chile
- El Salvador
- Colombia
- Peru
- Venezuela

In all cases it is perceived as a small scale phenomenon
En Chile, el Cáncer Pulmonar es una enfermedad de alta prevalencia, es la tercera causa de mortalidad por cáncer en hombres y la cuarta causa entre las mujeres.

El tabaquismo es el principal factor de riesgo, siendo el causante del 85 a 90% de todos los casos. Clínica Alemana ha desarrollado un Programa de Detección Precoz de Cáncer Pulmonar para personas de alto riesgo, asintomáticos.

Este programa está dirigido a personas entre 50 y 80 años fumadores activos o ex fumadores de más de 20 cigarrillos al día. Este programa beneficiará a pacientes que sin saberlo, padecen Cáncer Pulmonar, de manera de poder realizar un tratamiento precoz, oportuno y curativo.

En qué consiste el programa:

El programa consiste en una consulta médica realizada por un Médico Broncopulmonar y los siguientes exámenes básicos:

- Tomografía computada de toráx (Scanner)
- Espirometría
- Test de Difusión

Consulta por Descuentos en Exámenes definidos en el Programa.
Lung cancer early detection program

Flujo de Atención

Programa Detección Precoz Cáncer Pulmonar

Coordinación de Atención en Programas

Enfermera Coordinadora realiza encuesta de factores de riesgo y confirma criterios de inclusión y exclusión.

Ingreso al Programa

Evaluación con exámenes
Scanner de Tórax (baja dosis)
Espirometría y Test de Difusión

Consulta Médica.
Evaluación con broncopulmonar*

Scanner con Nódulos Pulmonares
Reunión Multidisciplinaria
Seguimiento según protocolos preestablecidos

Otros hallazgos radiológicos, continúa en Programa.

Scanner normal
Seguimiento anual por 3 años

* Pacientes que lo requieran serán derivados al Programa Antitabaco “A Todo Pulmón”.
El cáncer de colon no avisa

- Dirigido a: Hombres y mujeres mayores de 50 años y/o con antecedentes de cáncer de colon o pólipos en la familia

En Chile mueren 1.000 personas al año por cáncer de colon, cifra que ha aumentado un 45% en los últimos años. Es necesario controles periódicos para descartarlo desde un inicio, pues un diagnóstico precoz mejora notablemente el pronóstico.

**FACTORES DE RIESGO**
- Hombres y mujeres mayores de 50 años.
- Antecedentes de cáncer de colon o pólipos en la familia.
- Sedentarismo.
- Alimentación pobre en fibra y con gran cantidad de grasas.
- Enfermedades intestinales como colitis ulcerosa o enfermedad de Crohn.s

**PRINCIPALES SÍNTOMAS DE ALARMA**
- Deposiciones con sangre.
- Cambio en la frecuencia o consistencia habitual de las deposiciones.
- Dolor o molestias abdominales.
- Pérdida del peso sin razón aparente.
Summary

CT examinations on asymptomatic individuals for IHA are performed in 11 of the 18 Latin American countries surveyed.

All are done within the private health system; public healthcare systems do not perform IHA with CT.

In all countries it is perceived as a low scale phenomena.

In LA there is a lack of legislation & regulation in relation to exposure to asymptomatic individuals in the context of IHA.

Insurance companies only reimburse CT examinations if they are justification (a common practice to achieve reimbursement is to “justify the exam.

In 6/11 countries in which CT is performed for IHA there is advertisement of the practice, which in all cases is perceived as a low scale phenomena.
Summary

Among the radiologists surveyed there is tolerance of this practice, end the general belief that it should / will be legally allowed in the future.

This emphasizes the importance of discussing proper justification of CT examinations for IHA, and educating lawmakers, regulators, clinical physicians, radiologists and general public regarding this issue.

Lack of legal frameworks / regulations in LA regarding the use of CT in asymptomatic individuals makes recommendations from respected global / regional organizations very important to raise awareness, educate and ensure good and safe practices.
Thanks for your attention
Final comment

The benefits of an early detection of disease through diagnostic imaging are well known by clinicians, radiologist and patients, however there is little knowledge & awareness of the RISKS involved in performing unjustified exams, and this include, but go far beyond, radiation exposure...
48yr old radiologist, non smoker, no risk factor for lung cancer. Referred by gastroenterologist to abdominal CT because of vague abdominal symptoms and during the procedure he asks the technician to include the thoracic region in the scan (“just to see if there is something the lungs…”.)

Diagnóstico
Muestras 1 y 2:
NEUMONIA INTERSTICIAL CON SIGNOS DE ORGANIZACION E HIPERPLASIA LINFOIDE.

Muestra 3:
LINFONODO SIN ALTERACIONES MORFOLOGICAS SIGNIFICATIVAS.
Discharged from hospital 5 days after surgery. 3 days after discharge he presents with fever and general malaise… A new CT is performed and pneumonia is diagnosed. Readmitted to hospital for 5 more days for ATB therapy.

- Final Balance of un Unjustified CT for lung cancer detection:
  - Unnecessary exposure (3 Chest CT)
  - Lung surgery.
  - 10 day hospitalization.
  - Antibiotics.
  - Personal and familiar emotional stress
  - Important financial cost

Health professionals and patients need to be educated regarding the RISKS of performing CT in asymptomatic individuals... that may well outweigh the benefits!
Health professionals and patients need to be educated regarding the risks of performing CT in asymptomatic individuals... and that they may outweigh the benefits!

Thanks for your attention