HA Working Group
on Severe Community-acquired Pneumonia

- An outline for the period 11-22 Feb 2003

HA SARS 17/03

4 July 2003

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At the first meeting on 11 Feb., members of the Working Group reckoned that an updated information on community-acquired pneumonia (CAP) in HA hospitals is crucial in addressing the situation on the reported increase in atypical pneumonia of unknown aetiology in Guangdong area. A prospective surveillance requesting HA hospitals to report on such cases was proposed and agreed for immediate implementation. To further define the focus for reporting, it was decided to look at the more severe form of CAP, severe CAP (SCAP), and considering that patients suffering from a more severe type of CAP would likely require assisted ventilation and/or intensive care, a working case definition for severe-CAP was defined as a case of community-acquired pneumonia required assisted ventilation or ICU/ HDU care. Hospitals were informed on 12 Feb. of the requirement for reporting, a report form and a clinical record form were attached for the purpose.

Also, hospitals were also reminded to refer to the Fact Sheet on Management of Severe Influenza Infections, based on the fact that influenza was at the annual peak season in February. More important, information related to rapid laboratory testing for an aetiological diagnosis and proper infection control measures, namely droplet precautions, were fully elaborated in the Fact Sheet which can be accessed in the HA intranet.

Daily update on the number of reported cases was conducted by the TFIC secretariat and close liaison with DH was maintained.

To obtain baseline information on severe CAP for ascertaining as to whether a genuine increase was evident, a lookback exercise on such cases based on discharge diagnosis was conducted. Data on the number of cases with discharge diagnosis of atypical pneumonia based on ICD9 codes were retrieved which showed the following picture:

Admission Date (Year/Month)	**Number of patients in ICU**	**Number of Death in ICU**
2001 December	72	36
2002 January	78	46
2002 February	74	35
2002 March	55	29
2002 April	66	31
2002 May	59	33
2002 June	59	20
2002 July	64	30
2002 August	65	31
2002 September	56	25
2002 October	59	24
2002 November	72	37
2002 December	67	29
2003 January	59	27

A presentation was given to members of the WG on 27 Feb on analysis of the reported cases in terms of key patient features, travel history to Mainland, outcome and aetiological diagnosis (file attached).

Subsequently, on 19 Feb., a case was confirmed as H5N1 avian influenza infection among the severe pneumonic patients admitted to HA hospitals. It was noticed that there were family members being hospitalised and the family had history of travel to Fujian in Mainland China.

In light of this finding, the severe CAP reporting channel and follow-up mechanism was reiterated at the 3rd WG meeting and hospital Infection Control Teams were requested to make sure that reported cases were supplemented with detailed information through the completion of clinical record forms. Also, the recommended test specimens should be sent-out to both DH and HKU was highlighted for members' attention. The first FAQ on severe CAP was issued on 21 February with emphasis on background information, reporting of cases of severe CAP, the need for laboratory investigations, appropriate infection control measures and the use of antivirals.

To summarise, the main focus of the WG during the period 11-22 February 2003 were:

- To ascertain whether an upsurge of severe CAP is encountered in HA hospitals;
- To alert hospital staff in the management of severe CAP, and the need for thorough laboratory investigations;
- To remind staff to adhere to proper infection control measures as advised for influenza, i.e. droplets precautions;
- To coordinate with DH in the exchange of information for updating;
- To look into reported cases for an aetiological diagnosis to guide specific patient management.

To conclude, it was the result of these concerted efforts that open lung biopsy was advised and performed on one of the close contacts of the index case of SARS ([redacted] from Guangdong) which led to the isolation and identification of the new Coronavirus as the causative agent for SARS by HKU and HA.

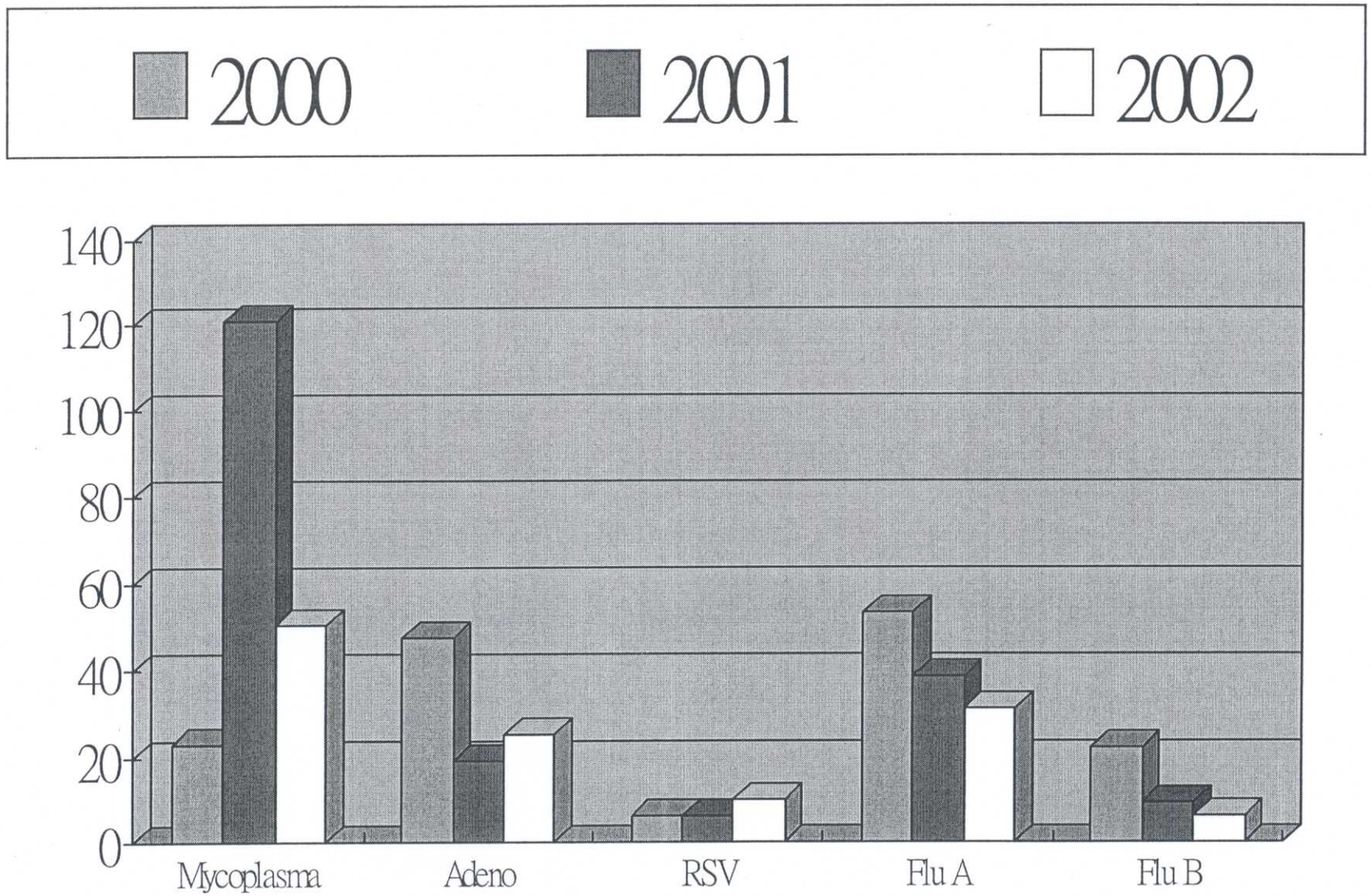
Surveillance summary

M:F	23:16
Age>50 years	28
Recent travel to China	14
• died	5 (35.7%)
Lymphocyte count <1.0	29
Outcome	
• Died	12 (30.7)
• Discharged	5

Agents identified

Psittacosis	2
Bacterial	2
H5N1	1
Adenovirus	2
Parainfluenza	2
Rickettsia	1
Influenza A	2
Influenza B	3
unknown	24 (61.5%)

Breakdown of positive respiratory pathogens in QEH



Lookback study

On pneumonia diagnosis code, they are

Code	Ext	Description
480.0	0	Adenoviral
480.1	0	RSV
480.2	0	Parainf
480.9	0	Viral
483.0	0	Mycoplasmal
483.1	0	Chlamydial
483.8	0	Other organisms
484.1	0	CMV
486	0	Pneumonia
486	1	Atypical pneumonia
487.0	0	Influenza

Ever ICU	Y		N		Row Total	
Admission Date (Year/Month)	No. of Episodes	Total IP & DP Deaths	No. of Episodes	Total IP & DP Deaths	No. of Episodes	Total IP & DP Deaths
2001-12	72	36	1208	215	1280	251
2002-01	78	46	1349	238	1427	284
2002-02	74	35	1368	215	1442	250
2002-03	55	29	1223	168	1278	197
2002-04	66	31	1141	165	1207	196
2002-05	59	33	1142	183	1201	216
2002-06	59	20	1045	165	1104	185
2002-07	64	30	1060	148	1124	178
2002-08	65	31	870	144	935	175
2002-09	56	25	840	148	896	173
2002-10	59	24	912	145	971	169
2002-11	72	37	903	152	975	189
2002-12	67	29	853	123	920	152
2003-01	59	27	1048	148	1107	175

ICU cases of Atypical CAP