Management of Varicella

Clinical scenarios

1) 'Kids have got chicken pox and granny is coming to stay – could she catch it? She's had it before':

> If you have ever had chicken pox you are considered immune for life.
> However 10% of the UK adult population are seronegative i.e. not immune. She could previously have been misdiagnosed as having chicken pox and therefore NOT be immune. As chicken pox is often a more serious infection in adults it may be sensible that she remains at home.

2) Should we have a chicken pox party:

> Mortality is 4-9/100 000 infections. 80% of these will be in adults i.e. more serious infection in adults. 20% of the above deaths will still be in children – so can still represent risk. If was to recommend a 'chicken pox party' and the child then died after contracting chicken pox would this be medico-legally defensible? The clinician could discuss the risks, numbers etc with the parent but the ultimate decision and consequences of that decision should reside with the parent.

3) 'I'm a primary school teacher. I'm 8 weeks pregnant and a child in my class has got chicken pox. What should I do'?

> Pregnant women are 5 times more likely to die than non-pregnant women should they develop chicken pox in pregnancy.
>
> Has she ever had chicken pox? Risk is only if she is non-immune. Test for antibodies to varicella zoster. A significant exposure is classed as 5 mins face to face or 15 mins in the same room with someone 48h before lesions appear and until last lesion has crusted over.

4) I've got shingles – is it infectious? Where did I catch it from?

> It is caused by reactivation of varicella zoster from the dorsal nerve root ganglion. It occurs in about 25% of people who have had chicken pox previously. You are infectious but close contact with the vesicles is probably necessary.
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> Management plan:
> - Treat if present within 72hrs of onset of rash [can be offered after 72hrs if >50 and still developing new lesions.
> - Start tricyclic [reduces incidence of post-herpetic neuralgia]. e.g. amitriptyline 10mg
> - Consider oral steroids in those >50 with significant pain and no contraindications [reduces acute pain and improves speed of healing and return to daily activities but doesn't affect development of postherpetic neuralgia
> - Analgesia [NSAIDS,oxycodone,gabapentin single stat dose of 900mg but significant side effects]
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> For treatment of postherpetic neuralgia NICE recommends:
> 1st line: amitriptyline or pregabalin [start at 75mg bd max 300mg bd]. Alternatives if not tolerated nortriptyline/imipramine.

2nd line: amitriptyline and pregabalin
3rd line: refer specialist pain unit. Trial of tramadol 50-100mg qds or topical lidocaine. Do not start other opiods unless recommended by pain specialists.

5) 'A 22 year old man saw my colleague 3 days ago and was diagnosed with chicken pox. He comes to me complaining of shortness of breath but he has not chest signs'

Chicken pox in adults can be a serious infection with mortality risks as outlined above. He has symptoms of pneumonitis. HE REQUIRES IMMEDIATE ADMISSION. Do not be reassured by lack of chest signs!!!
Signs of severe infection [requiring hospital admission] include:
Respiratory symptoms [cough, SOB – chest SIGNS are often absent]=pneumonitis.
Common in adults (5-14%) can be life threatening.
Densely cropping vesicles
Haemorrhagic rash
Bleeding (from any site)
Neurological changes
Persisting fever with new vesicles after day 6

6) 'A 28 year old woman who is 25 weeks pregnant presents with a rash that looks suspiciously like chicken pox. She is a teacher and there has been a recent outbreak of chicken pox at school'

Pregnant women are at increased risk of pneumonitis, severe disease and death. I would discuss with ON call. Admission for IV aciclovir is usually recommended. Aciclovir appears to be safe in pregnancy.
Highest risk to the woman if:

- >20 week gestation [declining T cell function]
- smokers of any gestation
- those with chronic lung disease
- immunocompromised in some other way
- >100 skin lesions

It is rare for the foetus to be affected after 20 weeks gestation.
Chicken pox in pregnancy increases the risk of miscarriage/premature labour.

7) 'A 32 year old who delivered a full term healthy boy 5 days ago, present with what looks like chicken pox on her body'

Again I would discuss with on-call.
The neonate is at high risk of developing chicken pox with mortality 30% if untreated if mother develops chicken pox 5d ays prior to or 2 days after delivery.
VZIG recommended to infants born to mothers developing chicken pox 7d before to 7days after delivery. Intravenous aciclovir is added if the neonate develops chicken pox.
As for the treatment of mother the question is whether she is still deemed immunocompromised in which case should she be admitted to hospital [again discuss with on-call]