

## Topics

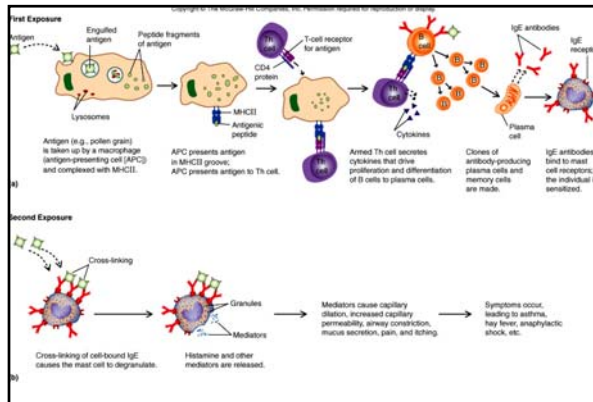
- Type I hypersensitivity
- Type II hypersensitivity

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## Type I hypersensitivity

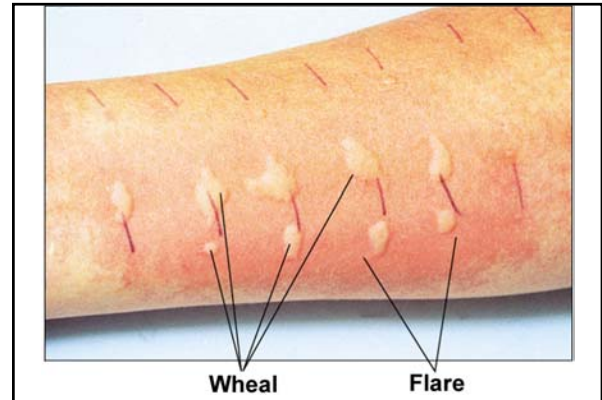
- Immediate IgE-mediated
- Localized anaphylaxis
- General anaphylaxis
- Immunotherapy

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Figure 18.1 - Immediate IgE-mediated



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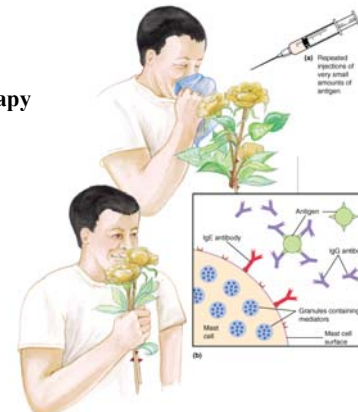
Figure 18.2 Localized anaphylaxis

## Generalized anaphylaxis

- Antigens become widespread
- Shock (reduced blood pressure)
- Ex. Bee stings, peanuts and penicillins

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## Figure 18.3 Immunotherapy



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## Type II hypersensitivity

- Cytotoxic
- Transfusion reactions
- Hemolytic diseases

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## Cytotoxic

- Complement lysis
- Antibody – dependent cellular cytotoxicity (ADCC)

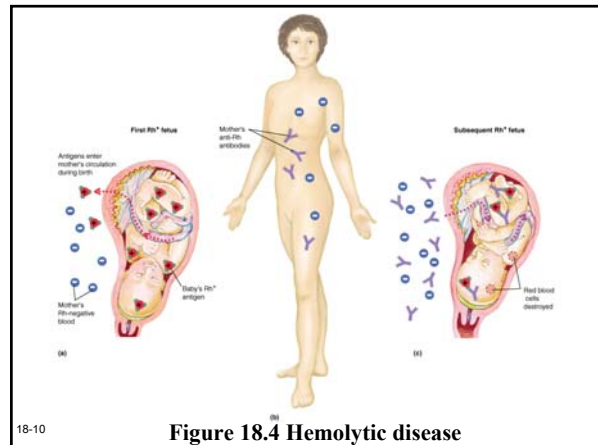
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**TABLE 18.2** Antigens and Antibodies in Human ABO Blood Groups

Blood Type	Antigen Present on Erythrocyte Membranes	Antibody in Plasma	Incidence of Type in United States		
			Among Whites	Among Asians	Among Blacks
A	A	Anti-B	41%	28%	27%
B	B	Anti-A	10%	27%	20%
AB	A and B	Neither anti-A nor anti-B	4%	5%	7%
O	Neither	Anti-A and anti-B	45%	40%	46%

Table 18.2 - Transfusion reactions

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Figure 18.4 Hemolytic disease